

APPENDIX 2

REQUIRED MODIFICATIONS TO SCHEDULE 1

SCHEDULE 1

Residential End-User Connection

SCHEDULE 1

RESIDENTIAL END-USER CONNECTION

CONTENTS

1. SCOPE	1
2. SERVICE LEVEL GUARANTEES	1
3. SERVICE DESCRIPTION AND ACCESS POINTS	4
4. ORDERING AND PROVISIONING PROCEDURE	6
5. RESIDENTIAL END-USER CONNECTION REQUEST	7
6. DELIVERY	

CONTENT PAGE – MODIFICATION REQUIRED

IDA Directed Modifications: IDA notes that clause 6A has not been reflected in the content page. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to the content page to reflect clause 6A.

<u>6A. JOINT INVESTIGATION OF FAULTS</u>	41
7. RESPONSIBILITY AT DP AND OPENNET FDF	15
8. DEACTIVATION	16
9. STANDARD TERMS AND CONDITIONS	16
10. ACCESS AND APPROVALS REQUIRED	19
11. FAULT REPORTING AND CLEARING	19
12. SERVICE LEVEL AVAILABILITY	23
13. PROTECTION AND SAFETY	24
14. TERM OF LICENCE	24
15. SUSPENSION	24
16. TERMINATION OF LICENCE	25
17. REDUNDANCY SERVICE	27
18. RELOCATION SERVICE FROM ONE RESIDENTIAL ADDRESS TO ANOTHER RESIDENTIAL ADDRESS	28

19. SECOND TERMINATION POINT

29

CONTENT PAGE – MODIFICATION REQUIRED

20. FIBRE HANDOVER PROCESS

30

IDA Directed Modifications: IDA refers OpenNet to its directed modifications to clause 20 below. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to the content page as a consequence to the directed modifications to clause 20.

ANNEX 1A: REQUEST FORM FOR RESIDENTIAL END-USER CONNECTION

ANNEX 1B: REQUEST FOR CANCELLATION OF RESIDENTIAL END-USER CONNECTION DUE TO INSTALLATION-RELATED FAULT

ANNEX 1C: FAULT RECTIFICATION SERVICE REPORT

SCHEDULE 1

RESIDENTIAL END-USER CONNECTION

SCHEDULE 1 – MODIFICATION REQUIRED

IDA Directed Modifications: IDA refers OpenNet to section 3 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs OpenNet to propose, for IDA’s approval, modifications to Schedule 1 in the manner specified therein. Without limitation to the above, OpenNet should waive any cancellation charges (currently equivalent to the Installation Charge) for long unresolved delays and OpenNet should propose for IDA’s consideration the period for delay, which should be reasonable, for which it would waive the cancellation charges.

[ON 11 Apr 12 : Amended as per IDA’s Direction.]

IDA refers OpenNet to section 10 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs OpenNet to propose, for IDA’s approval, modifications to Schedule 1 in the manner specified therein.

[ON 11 Apr 12 : Amended as per IDA’s Direction.]

IDA refers to section 12 of the Explanatory Memorandum to this Direction, in relation to the Missed Appointments Charges proposed by OpenNet. IDA notes that this Schedule 1 contains references to “Missed Appointment Charge”. Without limitation to section 12 of the Explanatory Memorandum, OpenNet should remove the references to “Missed Appointment Charge” in this Schedule 1 and propose modifications where necessary to meet the requirements set out in section 12 of the Explanatory Memorandum.

[ON 11 Apr 12 : Amended as per IDA’s Direction.]

IDA notes that OpenNet may be offering services to a Residential premise via multiple Termination Points. In this regard, there is merit for OpenNet to clarify in this Schedule 1 on how Requesting Licensee would be expected to identify the precise Termination Point for the purpose of ordering specific services under the ICO (e.g., removal of Termination Point). Accordingly, IDA directs OpenNet to propose, for IDA’s approval, modifications to Schedule 1 to address the above.

[ON 11 Apr 12 : Amended as per IDA’s Direction.]

1. SCOPE

This Schedule 1 sets out the terms and conditions under which OpenNet will provide the Requesting Licensee with a licence for:

- (i) Layer 1 Service (a service provided by OpenNet for the use of passive optical fibre cable) from OpenNet's designated Central Office (or "CO") to the First Termination Point of a Residential Premise for the purpose of the Requesting Licensee providing GPON services; or
- (ii) Layer 1 Service from OpenNet's designated CO to the First Termination Point of a Residential Premise for the purpose of the Requesting Licensee providing OE services

(Residential End-User Connection).

1.1 The Residential End-User Connection is a service provided by OpenNet to the Requesting Licensee for the purpose of delivering GPON or OE services over the Layer 1 Services highlighted above to a Residential Premise at a:

- (a) High-Rise Residential Building/Non-Residential Building; or
- (b) Landed Residential Premise.

1.2 For the avoidance of doubt, OpenNet may provide a Residential End-User Connection via the 1st or 2nd fibre installed in the First Termination Point or in some cases and only where necessary, the Second Termination Point, and all terms and conditions of this Schedule 1 shall apply regardless of which fibre is used.

1.3 This Schedule only applies to Requesting Licensees who are FBOs.

2. SERVICE LEVEL GUARANTEES

2.1 OpenNet will provide the Service Level Guarantees in respect of Residential End-User Connection as set out in this Schedule. If OpenNet fails to meet any service activation period, Mean Time To Recovery or service level availability (collectively called the **Service Level Guarantees**) applicable to this Schedule and the failure to meet the Service Level Guarantees is solely caused by OpenNet, its contractors and/or suppliers, OpenNet will provide a remedy in the form of a rebate to the Requesting Licensee in accordance with:

- (a) Clause 6.10 and any terms and conditions contained in this Schedule in respect of request and provisioning timeframes;
- (b) Clause 11.14 and any terms and conditions contained in this Schedule in respect of fault rectification timeframes; and
- (c) Clause 12.1 and any terms and conditions contained in this Schedule in respect of service level availability.

CLAUSE 2.2 – MODIFICATION REQUIRED

2.2 A claim by the Requesting Licensee shall be made in writing within thirty (30) Calendar Days of the completion of the relevant calendar month on which the Service Level Guarantees are measured. The amount in respect of any claim shall be paid to the Requesting Licensee in the form of a rebate. The Requesting Licensee acknowledges that a failure to make a claim within the specified timeframes under this paragraph means that the Requesting Licensee waives any entitlement to the Service Level Guarantee payment in respect of that claim. OpenNet will respond within (30) Calendar Days from date of claim stating if submission by Requesting Licensee is valid for rebates or additional information is required to be provided by the Requesting Licensee where OpenNet assessed the Requesting Licensee’s submission included invalid claims. For valid claims submitted within the timeframe, OpenNet shall provide the corresponding rebate in its next Invoice.

IDA Directed Modifications: Comments were received from industry respondents that OpenNet should process all claims within a 30-day period, following which any claims that remain unresolved should be automatically deemed to be approved. [ON 11 Apr 12 : ON disagreed that “any claims that remain unresolved should be automatically deemed to be approved.” Based on past experiences, ON has received duplicate claims from RLs. Additionally, per ICO, OpenNet will only pay on claims for which faults were reported.]

IDA considers that it is reasonable for the industry to expect OpenNet to process claims in a timely manner. However, IDA also recognises that OpenNet may face difficulties in complying with a 30-day timeframe, as there are a number of Requesting Licensees who may submit claims to OpenNet at any time. In consideration of the above, IDA is prepared to allow OpenNet to propose a timeframe to process the submitted claim. OpenNet is required to provide satisfactory justification to IDA as to the reasonableness of the timeframe.

IDA is also of the view that in the interest of clarity, OpenNet should clarify whether the rebate will be credited into Requesting Licensee's account in the bill immediately after OpenNet had processed the claim.

Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 2.2 to address the above.

[ON 11 Apr 12 : Amended as per IDA's Direction.]

2.22.3 If the Requesting Licensee is entitled to a rebate pursuant to the claim made hereunder, the amount of the rebate will be credited into the Requesting Licensee's account after it has been processed by OpenNet and will be reflected in OpenNet's bill to the Requesting Licensee in accordance with OpenNet's billing cycle.

2.32.4 The guarantee and rebates provided by OpenNet are:

- (a) of an ex-gratia nature and personal to the Requesting Licensee and are non-transferable; and
- (b) subject to this Schedule.

2.42.5 Despite anything to the contrary in this section, if the Requesting Licensee qualifies for any claim, OpenNet shall honour its obligations in respect of that claim but in the event of a dispute as to whether the Requesting Licensee qualifies for a claim or as to the quantum of the claim payable to the Requesting Licensee, the dispute shall be resolved in accordance with the Dispute Resolution Procedures in Schedule 17 of the ICO Agreement, or in the case of a Billing Dispute, in accordance with Schedule 16 of the ICO Agreement.

2.52.6 In addition to the specific terms and conditions of the Service Level Guarantees, the Service Level Guarantees shall not apply in any of the following circumstances:

- (a) the Residential End-User Connection is disconnected and/or reconnected by reason of it being suspended under the terms and conditions of this Schedule or ICO Agreement, except where the suspension is due to OpenNet's fault;
- (b) fault due to any equipment, wiring and/or cabling owned or operated by the Requesting Licensee or on behalf of the Requesting Licensee;

- (c) provision or restoration of the Residential End-User Connection where any site-coordination meeting, Joint Investigation Meeting or fault identification coordination meeting is involved, except where (a) the fault was caused by OpenNet; and (b) the Requesting Licensee has not contributed to any delay in setting up the meeting. Notwithstanding the above, in determining whether the Service Level Guarantees have been met by OpenNet, the time taken from the start of arranging any site-coordination meeting, Joint Investigation Meeting or fault identification coordination meeting up to the end of the meeting, shall always be excluded;

CLAUSE 2.6(d) – MODIFICATION REQUIRED

(d) where OpenNet had used its best endeavours ~~needs~~ to obtain expeditiously or maintain any licence or permission necessary to the provision or restoration of the Residential End-User Connection. Notwithstanding the above, in determining whether the Service Level Guarantees have been met by OpenNet, the time taken by OpenNet to obtain or maintain any licence or permission necessary to the provision or restoration of the Residential End-User Connection shall always be excluded. In the event the Requesting Licensee raise a dispute questioning OpenNet’s effort in obtaining the licence/permission, OpenNet will provide such evidence as may be available of its best endeavours;

IDA Directed Modifications: Comments were received that clause 2.6(d) should be subject to two requirements: (a) OpenNet must have used its best endeavours to obtain any licence or permission expeditiously; and (b) OpenNet must provide Requesting Licensees with evidence of such licence/permission, the steps taken to obtain it expeditiously and why OpenNet cannot obtain the licence/permission.

After careful consideration, IDA agrees that OpenNet should be required to use its best endeavours to obtain expeditiously the necessary licences or permission mentioned in clause 2.6(d). However, IDA is of the view that it is not necessary to require OpenNet to furnish evidence of this in every case. Instead, it would be more efficient if OpenNet were required to furnish evidence only in the event that a challenge or dispute is raised by Requesting Licensees as to whether OpenNet has used its best endeavours in the manner described above.

Accordingly, IDA directs OpenNet to propose, for IDA’s approval, modifications to clause 2.6(d) to incorporate the above requirements.

[ON 11 Apr 12 : Amended as per IDA's Direction.]

CLAUSE 2.6(e) – MODIFICATION REQUIRED

(e) OpenNet has difficulty accessing or working in the building or Residential End-User's Premise due to the building or premise being inaccessible, in unsafe working condition or in any other inadequate or deficient state despite best endeavours in obtaining permission or license required. In the event the Requesting Licensee raise a dispute questioning OpenNet's effort in obtaining the licence/permission, OpenNet will provide such evidence as may be available of its best endeavours ;

IDA Directed Modifications: Comments were received that clause 2.6(e) should be subject to two requirements: (a) OpenNet must use its best endeavours to remedy any building access difficulty expeditiously, and (b) OpenNet must provide Requesting Licensees with evidence of such difficulty, the steps taken to remedy it expeditiously and why OpenNet cannot remedy the difficulty.

After careful consideration, IDA agrees that OpenNet should be required to use its best endeavours to remedy expeditiously the building access difficulties (including any cases of purported building management obstruction). However, IDA is of the view that it is not necessary to require OpenNet to furnish evidence of this in every case. Instead, it would be more efficient if OpenNet were required to furnish evidence only in the event that a challenge or dispute is raised by Requesting Licensees as to whether OpenNet has used its best endeavours to expeditiously remedy the building access difficulties.

Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 2.6(e) to incorporate the above requirements.

[ON 11 Apr 12 : Amended as per IDA's Direction.]

CLAUSE 2.6(f) – MODIFICATION REQUIRED

(f) delay in the provision or restoration of the Residential End-User Connection caused by events beyond the reasonable control of OpenNet and/or its suppliers and contractors.'s reasonable control;

IDA Directed Modifications: Comments were received that clause 2.6(f) should be amended to state that OpenNet must be responsible for the acts and omissions of its suppliers and contractors. IDA notes that OpenNet is already liable in the case where the delay is caused by the acts or omission of OpenNet's suppliers and contractors. This is because it would be open to OpenNet to take appropriate measures against its suppliers and contractors. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 2.6(f) to clarify that nothing shall preclude OpenNet from being responsible for the acts and omissions of its contractors and suppliers. JON 11 Apr 12 : The amendment is to make it clear that anything beyond the reasonable control of either ON, its suppliers or its contractors are excluded ie. Force majeure issues which impact either of the 3 parties. Additionally, it is already described in clause 2.1 that ON is responsible for SLG due to its suppliers and contractors.]

- (g) OpenNet network outages for which the Requesting Licensee has not reported a fault;
- (h) fault is reported by the Requesting Licensee but no fault is found or confirmed after due and careful investigation, and verification by OpenNet;
- (i) OpenNet is required to carry out scheduled service interruption and the Requesting Licensee has been informed in accordance with clause 9.5; or
- (j) OpenNet is required to carry out fibre diversion at the request of the Government Agencies, private developers or other relevant parties and the Requesting Licensee has been informed in accordance with clause 9.5; or

(k) Where there is a request received from End-User or Requesting Licensee for Removal, Repair and Replacement and Relocation Requests.

2.62.7 If the Requesting Licensee disputes OpenNet's reason for rejection, its records and/or the amount of rebate, the Requesting Licensee shall not be entitled to be credited with any rebate until and unless the dispute has been resolved.

2.72.8 A failure by OpenNet to meet any Service Level Guarantee does not constitute a breach of the ICO Agreement or this Schedule.

2.82.9 The Requesting Licensee acknowledges that the relevant remedy provided under clause 2.1 is a genuine pre-estimate of the Requesting Licensee's loss and will be the

sole and exclusive remedy available to the Requesting Licensee for such failure to meet the relevant Service Level Guarantees for any Residential End-User Connection and shall be OpenNet's sole and exclusive liability to the Requesting Licensee for such failure.

3. SERVICE DESCRIPTION AND ACCESS POINTS

3.1 (A) Where the Requesting Licensee requests for Residential End-User Connection for the purpose of providing GPON services to the End-User, OpenNet will provide a licence for Residential End-User Connection of 1:24 Split Ratio to the Requesting Licensee with the following:

- (a) one (1) fibre strand from OpenNet's Fibre Distribution Frame (FDF) at the Central Office designated by OpenNet to OpenNet's splitter at the Building MDF Room for each group of twenty four (24) Residential Premises (or portion thereof);
- (b) one (1) dedicated fibre strand from the splitter to the First Termination Point of the Residential Premise;

CLAUSE 3.1(A)(c) – MODIFICATION REQUIRED

~~(c) one (1) Patching Service at OpenNet's FDF at the Building MDF Room and the Requesting Licensee shall pay a Patching Charge in accordance with Schedule 15 (Charges); and~~

IDA Directed Modifications: IDA refers OpenNet to section 2 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 3.1(A)(c) in the manner specified therein. JON 11 Apr 12 : Amended as per IDA's Direction.

~~(d) where necessary, one (1) Patching Service at OpenNet's FDF in the Central Office will be provided and the Requesting Licensee shall pay a Patching Charge in accordance with Schedule 15 (Charges).~~

CLAUSE 3.1(A) – MODIFICATION REQUIRED

Unless reasonably considered necessary by OpenNet, OpenNet shall utilise at least 90% of the connections in each splitter assigned to the Requesting Licensee in each of the FDF in the MDF room before an additional splitter is provisioned for the

Requesting Licensee in that MDF Room. Where it is obvious to OpenNet that there is a projected (i) increased demand by the Requesting Licensee for a particular locality is above normal eg. Where the Requesting Licensee has notified OpenNet of the Requesting Licensee's intention to carry out a promotion at a particular locality in advance such that OpenNet can provision the resources required or (ii) increase in consumer demand or (iii) delay in supply from the splitter's vendor. To facilitate OpenNet's consideration, Requesting Licensee shall provide to OpenNet its forecast in advance such that OpenNet can provision the resources required in time. OpenNet shall not be responsible for any delays in provisioning of service due to lack of splitters in the event the Requesting Licensee failed to provide its forecast in advance or provides inaccurate requirements.

IDA Directed Modifications: Comments were received that OpenNet should spell out the situations in which it will provision an additional splitter. To avoid dispute, in the interest of clarity and to ensure an efficient implementation of the ICO, IDA agrees that it would be reasonable to require OpenNet to do so. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 3.1(A) to clarify the conditions that would have to be fulfilled before OpenNet will consider it reasonably necessary to provision an additional splitter even though it has not utilised at least 90% of the existing splitter.

[ON 11 Apr 12 : Amended as per IDA's Direction].

- 3.1 (B) Where the Requesting Licensee requests for Residential End-User Connection for the purpose of providing OE services to the End-User, OpenNet will provide a licence for Residential End-User Connection of 1:24 Split Ratio to the Requesting Licensee with the following :
- (a) two (2) fibre strands from OpenNet's FDF at the Central Office designated by OpenNet to OpenNet's FDF at the Building MDF Room for each group of twenty four (24) Residential Premises (or portion thereof);
 - (b) one (1) dedicated fibre strand to the First Termination Point of the Residential Premise from OpenNet's FDF at the Building MDF Room;
 - (c) up to three (3) Patching Services at OpenNet's FDF in the Building MDF Room; and
 - (d) where necessary, two (2) Patching Services at OpenNet's FDF in the Central Office will be provided and the Requesting Licensee shall pay a Patching Charge in accordance with Schedule 15 (Charges).

- 3.2 For a Residential End-User Connection of 1:1 Split Ratio to the End-User, OpenNet will not provide any splitter at the Building MDF Room. OpenNet will provide:
- (a) one (1) dedicated fibre strand from OpenNet's FDF at the Central Office designated by OpenNet to OpenNet's FDF at the Building MDF Room;
 - (b) one (1) dedicated fibre strand from OpenNet's FDF at the Building MDF Room to the First Termination Point of the Residential Premise;
 - (c) one (1) Patching Service at OpenNet's FDF in the Building MDF Room;
 - (d) one (1) Patching Service at OpenNet's FDF in the Central Office and the Requesting Licensee shall pay a Patching Charge in accordance with Schedule 15 (Charges).
- 3.3 Where the Requesting Licensee requests for Residential End-User Connection of 1:24 Split Ratio for the purpose of providing GPON services to the End-User or Residential End-User Connection of 1:1 Split Ratio, the Requesting Licensee shall access the Residential End-User Connection at OpenNet's FDF at the Central Office designated by OpenNet or the Requesting Licensee's FDF at the Central Office designated by OpenNet and at the First Termination Point of the Residential Premise.
- 3.4 Where the Requesting Licensee requests for Residential End-User Connection of 1:24 Split Ratio for the purpose of providing OE services to the End-User, the Requesting Licensee shall access the Residential End-User Connection at OpenNet's FDF at the Central Office designated by OpenNet or the Requesting Licensee's FDF at the Central Office designated by OpenNet, at OpenNet's FDF at the Building MDF Room and at the First Termination Point of the Residential Premise.
- 3.5 Where the Requesting Licensee wishes to acquire subsequent fibre connection from CO to Building MDF Room, the Requesting Licensee shall acquire such fibre connection in accordance with Schedule 5 (CO to Building MDF Room Connection).
- 3.6 Where the Requesting Licensee acquires a Residential End-User Connection of 1:24 Split Ratio for the purpose of providing OE services to the End-User, the Requesting Licensee shall ensure the Residential End-User Connection is connected to active Optical Ethernet equipment.

CLAUSE 4 – MODIFICATION REQUIRED

4. ORDERING AND PROVISIONING PROCEDURE

IDA Directed Modifications: IDA refers OpenNet to section 7 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 4 in the manner specified therein. Without limitation to the above, OpenNet should propose a process to assist the industry, in a timely manner, to ascertain whether a particular premise should be considered a Residential Premise or a Non-Residential Premise, similar to the process proposed by OpenNet to assist the industry in determining whether a particular location should be considered a Non-Residential Premise or an NBAP. In the process, OpenNet should also address what the parties should do if they cannot agree to the classification. In IDA's opinion, the parties should follow the dispute resolution process in the ICO but with a shorter timeframe as the item under dispute is not complex. OpenNet should further propose a process to allow an Requesting Licensee to provide evidence of a change in usage of a particular premise, following which OpenNet would change the classification of the premise accordingly. [ON 11 Apr 12 : Amended as per IDA's Direction. The proposed modifications as directed by IDA would be addressed under new clause 4.3. ON had not proposed a shorter timeframe for the dispute resolution process as the timeframes for Mediation (to be conducted in accordance to Mediation Rules of the SMC) and Arbitration (to be conducted in accordance to Arbitration rules of SIAC) processes are fixed and cannot be changed. Any unilateral change of the timeframes for Mediation and Arbitration will entitle a party to claim breach of natural justice. Under the proposed new clause 4.3, the dispute in property classification will not arise so long the RL is able to provide the supporting document proof as evidence for change of usage of classification. Nonetheless, ON will use its best endeavours to resolve the dispute with the RL within the current timeframe of within 20 business days under the Inter-Working group.]

CLAUSE 4.1 – MODIFICATION REQUIRED

4.1 The Requesting Licensee shall submit its request for Residential End-User Connection (**Request**) to OpenNet on a Business Day in the form of Annex 1A stating, but not limited to the following information:

(a) the End-User's name, telephone number and address of the Residential Premise; and

(b) the Split Ratio required.

The Requesting Licensee should submit its Request for Residential End-User Connection (Request) to OpenNet via the OpenNet Platform, stating, but not limited to the following information:

(a) the End-User's name, telephone number and address of the Residential Premise; and

(b) the Split Ratio required.

For Request submission via the Service Portal, the Requesting Licensee shall submit a feasibility check for the End-User's address to verify the coverage status and select an available date and appointment time. Upon successful submission of the Request via the Service Portal, it will provide a Request acknowledgement.

For Request submission via the OpenNet Platform APIs, the Requesting Licensee shall perform the feasibility check for verifying the coverage status by supplying the postal code and unit number of the End-User where applicable. The Requesting Licensee shall also query the available time slots for that particular End-User's address. The Requesting Licensee shall then use the address details returned by OpenNet and the applicable timeslot related to the status of the feasibility check for submission of Request. Upon successful submission of the Request via the OpenNet Platform APIs, it will provide a Request acknowledgement.

For Request submitted via the OpenNet Platform, Requesting Licensees are able to modify the contact details of End-Users subject that the date of modification is more than three (3) Business Days from the request service activation date requested. The OpenNet Platform will notify the Requesting Licensee if the contact details have been successfully modified.

IDA Directed Modification: IDA refers OpenNet to section 10 of the Explanatory Memorandum to this Direction. Without limitation to the requirements therein, OpenNet should update its ICO to reflect that it has launched its Platform and commenced B2B transactions, and orders are processed through such means.

In addition, IDA requires OpenNet to clarify that it would allow Requesting Licensees to update the contact details of end-users that have been submitted in the Request.

Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 4.1 to comply with the above requirements. [JON 11 Apr 12 : Amended as per IDA's Direction.](#)

CLAUSE 4.2 – MODIFICATION REQUIRED

4.2 The Requesting Licensee may submit a request [with the relevant ORI via the OpenNet Platform when available](#) to relocate the [First or Second](#) Termination Point within the same Residential Premise, subject to the following terms and conditions:

IDA Directed Modifications: IDA notes the following comments that were made:

(a) OpenNet should allow the relocation request to be submitted in the same request as a new order and OpenNet should allow the Requesting Licensee to indicate via B2B and Portal: (i) that Termination Point relocation is required; and (ii) additional details related to the relocation;

(b) prior to installation, OpenNet should allow the Requesting Licensee to revise the order to request for Termination Point relocation or cancel the Termination Point relocation without impacting the original Request for Service date; and

(c) OpenNet should deal with fibre-related issues in End-User premises directly with the End-Users, as this would ensure efficiency and a better End-User experience.

After careful consideration, IDA is of the view that it may be overly prescriptive on IDA's part to dictate how the relocation process should be performed by OpenNet. That said, IDA agrees that at a minimum, relocation request could be requested from the Platform and via B2B transactions. With regard to (c), IDA refers the industry to section 6 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 4.2 to clarify that such relocation request could be minimally requested from

the Platform and via B2B transactions. [ON 11 Apr 12 : Amended as per IDA's Direction.]

CLAUSE 4.2(a) – MODIFICATION REQUIRED

(a) The Requesting Licensee hereby acknowledges and agrees that OpenNet shall not be held liable if despite its best endeavours there is any delay caused by any obstruction from the building owner, building management, home owner or End-User during the planned relocation service or any of the circumstances described in Clauses 2.6(e) and 2.6(f) above; or if there is any damage or repainting works required;

IDA Directed Modifications: IDA refers OpenNet to its directed modifications to clauses 2.6(e) and 2.6(f). The industry is generally of the view that OpenNet must use its best endeavour to resolve the obstruction before it could rely on such clause to relieve itself of its obligation to provision the said service within the stipulated timeframe. IDA agrees that the above expectation is reasonable. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 4.2 (a) to comply with the above. [ON 11 Apr 12 : Amended as per IDA's Direction.]

(b) Subject to Clauses 5.2, 5.3(b) and 5.3(d), OpenNet shall provide the relocation service by the end of three (3) Business Days from the receipt of a valid Request from the Requesting Licensee;

(c) The Requesting Licensee will have to bear the charge for installation of the relocated Termination Point in accordance to Schedule 15 (Charges);and

(d) The cancellation charge as set out in accordance to Schedule 15 (Charges) shall be applicable should the Requesting Licensee cancel the relocation Request after acceptance by OpenNet.

(e) The Requesting Licensee may also submit its Request for Relocation of the TP via OpenNet Platform.

4.3 Where a premise was classified as a Non-Residential Premise during the rollout of the NGNBN but has since undergone a change of premise type or the End-User claims the premise is a Residential Premise. Requesting Licensee shall obtain from the End-User and keep a record of the necessary documentary evidence as proof of

such change of premise type for verification by OpenNet. Such documentary evidence must consist of one or more of the following dated within the last three (3) months from the date of Request submitted in the End-User's name:

(a) Telecommunication / Internet bill;

(b) Service and Conservancy bill from town council ;

(c) Utilities bill from Singapore Power;

(d) Cable TV bill;

(e) Tenancy agreement for residence;

(f) Change of address as indicated on the National Registration Identity Card (NRIC).

For such cases, Requesting Licensee can request for reclassification of premise via the OpenNet Platform, when available. The Requesting Licensee will be informed via OpenNet Platform once the reclassification is successful. Upon receiving the notification of a successful reclassification, the Requesting Licensee shall then submit the Request for Residential End-User Connection via the OpenNet Platform.

If the Request is accepted, OpenNet will provision the Residential End-User Connection based on 1:16 split ratio in ten (10) Business Days or the preferred installation date requested by the Requesting Licensee , whichever is earlier.

OpenNet will waive the one-time installation charge for such premise at its first claim where such premise is classified or re-classified for the first time as a Residential Premise. Where a premise is subsequently re-classified as a Residential Premise after it has been re-classified as a Non-Residential Premise from a Residential Premise, no waiver of fees shall be given.

At all times, it shall be the responsibility and obligation of the Requesting Licensee to satisfy itself and obtain from the End-User sufficient documentary evidence of such change in premise. In the event upon OpenNet's verification there are insufficient evidence to support the change in premise type to a Residential Premise, OpenNet reserves the right to maintain or re-classify the premise type as a Non-Residential Premise and bill the Requesting Licensee all one time charges and monthly recurring charge applicable to a Non-Residential End-User Connection as per Schedule 15 (Charges) retrospectively. If Requesting Licensee disputes OpenNet's decision to

classify the premise as a Non-Residential Premise, the Requesting Licensee may raise a dispute in accordance to the Dispute Resolution process as set out in Schedule 17. However, a reference of such dispute for the Dispute Resolution process as set out in Schedule 17 shall not suspend or entitle the Requesting Licensee from withholding any payment or payment of any charges, partially or in whole, as billed or invoiced by OpenNet. Where OpenNet's decision is reversed or modified upon conclusion of the Dispute Resolution, OpenNet shall rebate to the Requesting Licensee such sums associated with the decision reversed or modified without interest.

CLAUSE 4.3 – MODIFICATION REQUIRED

4.43 For the avoidance of doubt, ~~change of uses~~switching from GPON to OE or from OE to GPON is allowed via the OpenNet Platform subject to the Requesting Licensee paying the applicable charges for Patching Service in accordance to Schedule 15 (Charges). OpenNet will provide a unique reference number or a similar form of identification in the notification upon successful submission of a GPON to OE or from OE to GPON Request.

For the switching from GPON to OE or from OE to GPON, the Requesting Licensee shall perform a check order status by providing, but not limiting to the unique reference number provided by OpenNet for the existing connection, before submitting its request for the switch. For avoidance of doubt, switching from GPON to OE or vice versa is only applicable for connections that are active.

Information of the estimated timeframe for the switch will be provided to the Requesting Licensee through OpenNet's platform during the switch.

The Requesting Licensee may approach OpenNet for specific requirements to the switching process, which will be on a Cost-Oriented Basis.

IDA Directed Modifications: In the interests of clarity and to promote certainty amongst the industry, IDA considers that there is merit in requiring OpenNet to specify further details on the ordering and provisioning process as well as timeframe for the change of use from GPON to OE and from OE to GPON. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 4.3 incorporate the above requirements. [ON 11 Apr 12 : Amended as per IDA's Direction.]

CLAUSE 4.54 – MODIFICATION REQUIRED

4.45 OpenNet shall at its sole discretion determine the serving CO and Building MDF Room from which the Residential End-User Connection will be provided. Subject to clause 4.5, the Requesting Licensee, is able to query the OpenNet Platform at no cost for the serving CO and Building MDF by providing the postal code for the End-User address.

IDA Directed Modifications: Comments were received that OpenNet should provide the Mandated Services information for the serving CO and Building MDF as part of the feasibility check for an address. The respondent noted that there should be one servicing CO and building MDF provided per address, and the information provided should be accurate for the provisioning of services.

After careful consideration, IDA agrees with the above suggestions. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to this Schedule to provide for a process for Requesting Licensees to request for the above information. As such information will be necessary for OE deployment, IDA's position is that such information should be readily made available and at no cost. [ON 11 Apr 12 : Amended as per IDA's Direction.]

CLAUSE 4.65 – MODIFICATION REQUIRED

4.56 ~~Initially, I~~ Information relating to the Mandated Services will be available on OpenNet's Platform website, for access by the Requesting Licensee through secured means. The secured access to OpenNet's Service Portalwebsite will require the payment of a Per User Account Charge (specified in clause 14 of Schedule 15 (Charges)) for each user account created. ~~Initially, I~~ Information relating to network outages will be sent to the Requesting Licensee via email or OpenNet Platform. The information relating to the Mandated Services and the information relating to network outages ~~shall be~~ made available on the OpenNet Platform ~~in due course~~. For the avoidance of doubt, such Per User Account Charge shall not be re-imposed when the information relating to Mandated Services is made available on the OpenNet Platform.

OpenNet shall include the following details in the written notification or via OpenNet Platform APIs to the Requesting Licensee:

(a) Affected location;

(b) Date of occurrence;

- (c) Time of occurrence (start & approximate end timings);
- (d) Cause of outage;
- (e) Steps taken to remedy the outage;
- (f) Steps (if any) required by Requesting Licensee to assist with rectification of outage;
- (g) Order Request Identifier of the affected orders; and
- (h) OpenNet's Network Operations Centre Contact Number.

IDA Directed Modifications: Comments were received that while this clause 4.5 provides that network outage information will be made available on OpenNet's website and Platform, there are no details on the types of information provided. The respondent highlighted that network outage information is critical for Requesting Licensees to monitor and manage their services and networks, and suggested that OpenNet make the following types of information available:

- (a) start time of the outage;***
- (b) length of time for which outage is expected to continue;***
- (c) services affected by the outage;***
- (d) steps taken to remedy the outage; and***
- (e) steps (if any) Requesting Licensee may be required to take to assist with rectification of outage.***

After careful consideration, IDA agrees that it would be reasonable to require OpenNet to provide, at a minimum, the information enumerated above to Requesting Licensees in relation to network outages. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to incorporate the above requirement.

IDA also refers OpenNet to section 10 of the Explanatory Memorandum to this Direction. IDA directs OpenNet to propose, for IDA's approval, modifications to clause 4.5 as specified therein. Without limitation to the foregoing, OpenNet should update clause 4.5 to reflect that OpenNet has

launched its Platform, commenced B2B transactions and that orders are processed through such means. OpenNet should also reflect that Mandated Services information shall be provided over the Platform and via B2B transactions. [ON 11 Apr 12 : Amended as per IDA's Direction.]

5. RESIDENTIAL END-USER CONNECTION REQUEST

5.1 OpenNet shall process all Requests received for Residential End-User Connection on on a 'first come, first served' basis.

CLAUSE 5.2 – MODIFICATION REQUIRED

Version 1:

5.2 For each Business Day, OpenNet shall process a combined total of no more than 500480 Requests for Basic Mandated Services and Layer 1 Redundancy Services (Maximum Quota) from all Requesting Licensees, ~~and in any single week, OpenNet will not process more than 2,400 Requests for Basic Mandated Services and Layer 1 Redundancy Services from all Requesting Licensees.~~ For avoidance of doubt, Requesting Licensee is able to select such dates made available from the OpenNet Platform and for which the Request is to be fulfilled except such Business Day where the Maximum Quota has been reached. OpenNet will process all Requests on a 'first come, first served' basis. The Maximum Quota is not applicable to requests for deactivation of any Connection.

(i) If OpenNet finds that more than 95% of the quota has been used consistently over a period of twelve (12) weeks preceding the review month (namely January, April, July and September), OpenNet shall increase its daily quota for the quarter in which the review month occurs. If OpenNet finds that less than 80% of the quota has been used consistently over a period of twelve (12) weeks preceding the review month (namely January, April, July and September), OpenNet shall decrease its daily quota for the quarter in which the review month occurs. The review mechanism will be revised regularly subjected to the Authority's approval. To ensure better capacity planning, the Requesting Licensee will be required to provide within the first week of the current quarter, a 4-quarter rolling forecast with monthly breakdown for the coming quarter. E.g The Requesting Licensee will provide in 1st week of January 2013 the forecast for April to June 2013.

(ii) For seasonal increase in demand during quarterly major fairs (namely IT Show in March, PC Show in June, Comex Show in September and SITEX in November), the Maximum Quota shall be supplemented by Seasonal Slots (temporary increase of installation slots in excess of the Maximum Quota) and for which a sub-quota for Non-Residential Premise installation will be established. The Seasonal Slots, including the sub-quota, shall be subjected to such terms and conditions stated in the Seasonal Slots Notification.

Version 2 :

5.2 For each Business Day, OpenNet shall process a combined total of no more than 655 Requests for Basic Mandated Services and Layer 1 Redundancy Services (Maximum Quota) from all Requesting Licensees. For avoidance of doubt, Requesting Licensee is able to select such dates made available from the OpenNet Platform and for which the Request is to be fulfilled except such Business Day where the Maximum Quota has been reached. OpenNet will process all Requests on a 'first come, first served' basis. The Maximum Quota is not applicable to requests for deactivation of any Connection.

The Maximum Quota will be allocated in the following manner according to the type of work to be performed.

- (i) Schedule 1 High-rise Residential Premise installation, repair/replacement, removal, re-location (within the same premise and to another premise) and 2nd port activation of 1st TP and 2nd TP i.e 170 installation slots per business day which are distributed across 4 time-slots within the business day
- (ii) Schedule 1 Landed Residential Premise installation, repair/replacement, removal, re-location (within the same premise and to another premise) and 2nd port activation of 1st TP and 2nd TP i.e 15 installation slots per business day which are distributed across 2 time-slots within the business day
- (iii) Schedule 2 Non-Residential Premise installation, repair/replacement, removal, re-location (within the same premise and to another premise) and 2nd port activation of 1st TP and 2nd TP i.e 40 installation slots per business day which are distributed across the time-slots within the business day
- (iv) Schedule 3 NBAP installation, removal and 2nd port activation of 1st TP i.e 5 installation slots per business day
- (v) Express Service activation i.e. 40 per Business Days

(vi) All unused quota shall be used for Requests that only require patching service in the CO and MDF to activate the connection.

<u>Type of Work</u>	<u>Installation Slots Per Business Day</u>
<u>Schedule 1 High-rise Residential Premise</u>	<u>170</u>
<u>Schedule 1 Landed Residential Premise installation</u>	<u>15</u>
<u>Schedule 2 Non-Residential Premise installation</u>	<u>40</u>
<u>Schedule 3 NBAP</u>	<u>5</u>
<u>Express Service Patching</u>	<u>40</u>
<u>Unused Quota</u>	<u>≤ 655</u>

- (i) If OpenNet finds that more than 95% of the quota has been used consistently over a period of twelve (12) weeks preceding the review month (namely January, April, July and September), OpenNet shall increase its daily quota for the quarter in which the review month occurs. If OpenNet finds that less than 80% of the quota has been used consistently over a period of twelve (12) weeks preceding the review month (namely January, April, July and September), OpenNet shall decrease its daily quota accordingly within the quarter in which the review month occurs. The review mechanism will be revised regularly subjected to the Authority's approval. To ensure better capacity planning, the Requesting Licensee will be required to provide within the first week of the current quarter, a 4-quarter rolling forecast with monthly breakdown for the coming quarter. E.g The Requesting Licensee will provide in 1st week of January 2013 the forecast for April to June 2013.
- (ii) For seasonal increase in demand during quarterly major fairs (namely IT Show in March, PC Show in June, Comex Show in September and SITEX in November), Maximum Quota shall be supplement by Seasonal Slots (temporary increase of installation slots in excess of the Maximum Quota).

The Seasonal Slots shall be subjected to the terms and conditions stated in the Seasonal Slots Notification.

IDA Directed Modifications: IDA refers OpenNet to section 1 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 5.2 in the manner specified therein. [ON 11 Apr 12 : ON is proposing 2 versions. Please refer to cover letter for the justifications.]

CLAUSES 5.3(a) – (c) – MODIFICATION REQUIRED

5.3 Within one (1) Business Day of the date on which OpenNet receives the request for Residential End-User Connection (**Request Date**) and subject to clause 5.2, OpenNet must notify the Requesting Licensee (and shall provide the Requesting Licensee with a unique reference number or a similar form of identification in the notification) if its Request is rejected for any one of the following reasons:

- (a) the Request for Residential End-User Connection is not in the prescribed form;
- (b) the Request does not contain all the required information or the information provided is inaccurate or misleading;
- (c) the service activation date requested is less than three (3) Business Days from the date of receipt of a Request;

Where OpenNet receives a Request for Residential End-User Connection (Request Date) via the OpenNet Platform, OpenNet will validate and notify the Requesting Licensee, so that the Requesting Licensee is able to make the necessary corrections, if the Request does not meet any one of the following reasons :

- (a) Data entered for the fields does not meet the required format;
- (b) the Request does not contain all the required information or the information provided is inaccurate or misleading;
- (c) the service activation date requested is less than three (3) Business Days from the date of receipt of a Request;

Within one (1) Business Day of the date on which OpenNet receives the Request via the OpenNet Platform for Residential End-User Connection (**Request Date**)

and subject to clause 5.2, OpenNet must notify the Requesting Licensee (and shall provide the Requesting Licensee with a unique reference number or a similar form of identification in the notification) if its Request is rejected for any one of the following reasons:

- (a) the Requesting Licensee has committed a material breach of the ICO Agreement or this Schedule; or
- (b) where the first and second fibre of the First Termination Point are in use.
- (c) where the OpenNet Platform is experiencing technical problems

IDA Directed Modifications: Comments were received that clauses 5.3(a)-(c) should not apply in the case of B2B orders. Instead, the “errors” described in these clauses should be checked in real-time and feedback provided immediately so that corrections can be made on the spot.

After careful consideration, IDA agrees that doing so would result in a more efficient service provisioning. Accordingly, IDA directs OpenNet to propose, for IDA’s approval, modifications to clauses 5.3(a)-(c) to give effect to the above.

IDA further refers OpenNet to section 10 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs OpenNet to propose, for IDA’s approval, the necessary modifications to give effect to the directed modifications set out therein. Without limitation to the foregoing, OpenNet should update clauses 5.3(a)-(c) to reflect that OpenNet has launched its Platform, commenced B2B transactions and that orders are processed through such means. [ON Comments 11 Apr 12 : The term “real-time” is a subjective and abstract expression. It serves to confuse and give rise to misunderstanding. Hence, ON’s proposed modifications did not include this term.]

- (d) the Requesting Licensee has committed a material breach of the ICO Agreement or this Schedule; or

CLAUSE 5.3(e) – MODIFICATION REQUIRED

(e) where the first and second fibre of the First Termination Point are in use. In such a situation, OpenNet will offer to install a Second Termination Point as per charges stated in Schedule 15.

IDA Directed Modifications: Comments were received that given OpenNet's position as the NetCo of the Next Gen NGN in a multi-OpCo environment, OpenNet should be required to provide a connection when requested, and not be allowed to reject requests on the basis that both fibre pairs are not available. It was further noted that, as currently drafted, clause 5.3(e) is ambiguous as it is not clear whether OpenNet has any obligation to fulfil the Request if both fibre pairs are not available.

After careful consideration, IDA considers that OpenNet should: (a) be required to provision an additional Termination Point if both strands of fibre in the First Termination Point have been used; and (b) inform Requesting Licensees of the relevant charges for the additional Termination Point at the time of order by the Requesting Licensee. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 5.3(e) to incorporate the above requirements. [ON 11 Apr 12 : Amended as per IDA's Direction.]

CLAUSE 5.4 – MODIFICATION REQUIRED

5.4 Within three (3) Business Days of the Request Date and subject to clause 5.2, OpenNet must notify the Requesting Licensee (and shall provide the Requesting Licensee with a unique reference number or a similar form of identification in the notification) whether its Request is accepted, or if rejected, for any one of the following reasons, except where there is Insufficient Capacity, OpenNet must also notify the Requesting Licensee within three (3) Business Days of the Request Date that there is Insufficient Capacity and the timeframe to notify the acceptance or rejection of the Request shall be extended to within ten (10) or forty (40) Business Days of the Request Date:

IDA Directed Modifications: IDA refers OpenNet to its directed modifications to clause 5.5. Accordingly, IDA directs OpenNet to propose, for IDA's approval, any consequential modifications to clause 5.4 to comply with the above. [ON 11 Apr 12 : There are no consequential modifications to be made to clause 5.4 as it is covered under clause 5.5]

- (a) the equipment or services that the Requesting Licensee proposes to use or to provide interfere with, or cause deterioration to services supplied by OpenNet;

CLAUSE 5.4(b) – MODIFICATION REQUIRED

- (b) there is obstruction from building owner, building management, home owner or End-User to OpenNet installation or installation schedule including any breach by building owner, building management, home owner or End-User of applicable regulatory requirements including for example COPIF. OpenNet shall use its best endeavours to resolve such obstructions and where applicable, OpenNet shall refer any breaches of regulatory requirements to the Authority for the Authority’s action and follow up;

IDA Directed Modifications: IDA received a number of comments on this clause:

- (a) ***An industry respondent commented that it should be for IDA to decide if there is any obstruction or regulatory breach, and that by its proposed amendments, OpenNet is effectively arrogating to itself the power to make a regulatory determination, which cannot be allowed.***
- (b) ***Another industry respondent observed that OpenNet’s proposed amendments potentially widens OpenNet’s ability to delay notifying Requesting Licensees of the order status. This delay will translate into greater uncertainty and prolonged waiting times for customers. The respondent therefore submitted that it is necessary for this clause to be amended so that:***
 - (i) ***OpenNet must demonstrate that it has exhausted its efforts in attempting to resolve the obstruction with the building owner / building management / customer before rejecting a request; and***
 - (ii) ***IDA and not OpenNet should determine whether the building management or customer has breached any regulatory requirements, and should therefore be denied service.***

IDA has considered the comments carefully.

In respect of (a), IDA considers that OpenNet’s proposed amendments should be removed as any breaches of regulatory requirements should be left to IDA to enforce, and should not be used as a reason for rejection. [ON’s Comments 11 Apr 12 : ON should be entitled to rely on regulatory breaches as an obstruction as otherwise would render such regulatory requirements nugatory. To remove reference to regulatory breaches leaves ON with an impossible situation of complying with its obligations when the other relevant parties do not perform their obligations under the law. However, ON recognise IDA’s concerns and will, where applicable (ie. In cases of breaches of regulatory requirements) refer such cases to IDA for its action and followup.]

In respect of (b), IDA considers that it would be reasonable to require OpenNet to use its best endeavours to resolve the issue with the relevant party before declaring that there is an obstruction.

Accordingly, IDA directs OpenNet to propose, for IDA’s approval, modifications to clause 5.4(b) to give effect to the above. [ON 11 Apr 12 : Amended as per IDA’s Direction.]

- (c) the Transmission Tie Cable (installed pursuant to Co-location Service in Schedule 12) for connection to the Residential End-User Connection is yet to be operational at the point in time of OpenNet’s provisioning of the Residential End-User Connection;

CLAUSE 5.4(d) – MODIFICATION REQUIRED

- (d) ___ OpenNet has not rolled out its Network to the Building; ~~or~~ and as at the date such Request is received, OpenNet was not required to roll out its Network to such location under the terms of OpenNet’s FBO License; or

IDA Directed Modifications: An industry respondent commented that OpenNet should not be allowed to reject a Request if it failed to roll out its Network due to its own default.

After careful consideration, IDA agrees that the suggestion above is reasonable as the Requesting Licensee should not be penalised for OpenNet’s default. Accordingly, IDA directs OpenNet to propose, for IDA’s approval, modifications to incorporate this suggestion. For

example, to satisfy this requirement, the following line could be added immediately at the end of clause 5.4(d): “and as at the date such Request is processed, OpenNet was not required to roll out its Network to such location under the terms of OpenNet’s FBO Licence.” JON 11 Apr 12 : Amended as per IDA’s Direction.

- (a) there are security and confidentiality requirements or restrictions imposed on OpenNet by Government Agencies.

CLAUSE 5.5 – MODIFICATION REQUIRED

5.5 If there is sufficient capacity to provide the Residential End-User Connection pursuant to clause 6.1, OpenNet shall advise the Requesting Licensee within three (3) Business Days whether the Residential End-User Connection has been successfully set up. In the event that there is ~~I~~nsufficient ~~C~~apacity to provide the Residential End-User Connection pursuant to the Request due to sudden surge of orders in a short period of time at a location or multiple Requesting Licensees serving the same location giving rise to rapid exhaustion of resources for that location or OpenNet’s Network has not been rolled out to that location, clause 6.2 shall apply and OpenNet shall inform the Requesting Licensee accordingly within three (3) Business Days and advise the Requesting Licensee that the RFS of the Residential End-User Connection will be extended to at least ~~within either~~ ten (10) Business Days if there is Insufficient Capacity from FTTB Node of the Residential Premise to the First Termination Point or at least ~~or~~ forty (40) Business Days (as the case may be) whether the Residential End-User Connection has been ~~successfully set up~~. if there is insufficient capacity from CO to the First Termination Point. Upon receipt of OpenNet’s notification of insufficient capacity, the Requesting Licensee have an option to either select a new appointment date or cancel the Request without charges within one (1) Business Day through OpenNet Platform, when available.

IDA Directed Modifications: IDA has received a number of comments in relation to the situation where OpenNet need to extend its SAP due to insufficient capacity:

(a) OpenNet should be made to confirm and clarify when the 10 Business Days or the 40 Business Days applies. Another respondent commented that OpenNet must provide reasons to the Requesting Licensee and justify why it needs to take the proposed number of days to fix the issue;

(b) when there is insufficient capacity, Requesting Licensees must have the option to re-select a new appointment date, or cancel the order. Since OpenNet is unable to fulfil the initial order, it is only fair that the Requesting Licensees be given the opportunity to seek concurrence with the Retail Service Providers/End Users, and not be subject to accepting any appointment date determined by OpenNet; and

(c) a respondent commented that should IDA allow such clauses to remain, then in such cases, OpenNet should allow Requesting Licensees to cancel the order, at no cost to Requesting Licensees.

IDA has carefully reviewed the comments and agrees that the process related to insufficient capacity has to be amended. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modification to clause 5.5 to include the following:

(a) clarification on when insufficient capacity would happen and how OpenNet would determine the applicable SAP; [ON 11 Apr 12 : Amended as per IDA's Direction.]

(b) in the event where OpenNet needs to extend the SAP due to insufficient capacity, OpenNet should inform Requesting Licensee on or before the 3rd Business Days from the date of Request on the reason behind the extension and the applicable SAP (including the proposed new appointment date, if applicable). OpenNet would then provide Requesting Licensee with an opportunity to either:

(i) proceed with the order. In such situation, OpenNet should allow Requesting Licensee to proceed with the proposed appointment date or to select a new appointment date; or [ON 11 Apr 12 : Amended as per IDA's Direction.]

(ii) cancel the order without any cancellation charge. [ON 11 Apr 12 : Amended as per IDA's Direction.]

5.6 The Requesting Licensee shall pay OpenNet the applicable Installation Charge and Patching Charge specified in Schedule 15 (Charges) for provisioning the Residential End-User Connection.

CLAUSE 5.7 – MODIFICATION REQUIRED

- 5.7 Where OpenNet rejects any Request for Residential End-User Connection, OpenNet shall provide reasons explaining the basis for rejection promptly.

IDA Directed Modifications: Comments were received that the timeframe for accepting or rejecting a Request is inappropriate and overly lengthy.

IDA has considered the issue carefully and agrees that it would be reasonable to require OpenNet to promptly notify the Requesting Licensees of any rejection and explain the basis of such rejection. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 5.7 to incorporate the above requirements. [ON 11 Apr 12 : Amended as per IDA's Direction.]

- 5.8 Where OpenNet has informed the Requesting Licensee that a Residential Premise has been installed with a First Termination Point and a valid Residential End-User Connection Request has been submitted by the Requesting Licensee for such a Residential Premise but it is subsequently found by OpenNet that the said Residential Premise has actually not been installed with the First Termination Point (due to an error in Mandated Services information which is caused solely by OpenNet, its contractors or suppliers), then OpenNet shall provision the Residential End-User Connection Service on the same terms and conditions as if the First Termination Point had been installed at the said Residential Premise. For the avoidance of doubt, OpenNet shall not impose the Installation Charge for the installation of such First Termination Points.

- 5.9 Where it is subsequently determined by OpenNet that a valid Residential End-User Connection Request submitted by the Requesting Licensee is for a Non-Residential Premise (due to an error in Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers), then OpenNet shall duly inform the Requesting Licensee of the nature of such error, and commence to deliver the service after the Requesting Licensee confirms that it wishes to proceed with the order; however, any charges imposed by OpenNet will follow the rates for a Residential End-User Connection (i.e. the entire Clause 1 of Schedule 15). For the avoidance of doubt, all applicable charges under Schedule 15 for this End-User Premise shall revert to the charges for Non-Residential Premises upon the expiry of the 12 month contract period.

CLAUSE 5.10 – MODIFICATION REQUIRED

5.10 Where it is subsequently determined by OpenNet that a valid Residential End-User Connection Request submitted by the Requesting Licensee is for a Residential Premise that is not a covered site (due to an error in Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers), then OpenNet shall duly inform the Requesting Licensee of the nature of the error, and have the right to reject the Residential End-User Connection Request; however, OpenNet shall credit the Requesting Licensee with a one (1) month rebate of the Monthly Recurring Charge. For the avoidance of doubt, this clause 5.10 shall also be applicable to a rejection under clause 5.4(d) where such rejection is due to an error in Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers as well as a rejection under clauses 5.4(b) or 5.4(e). The rebates, where applicable will be shown in the next Invoice.

IDA Directed Modifications: Comments were received that OpenNet should inform the Requesting Licensee where rebates are provided. IDA has considered the issue and agrees that it would only be reasonable that OpenNet make available such information to the Requesting Licensee. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 5.10 to incorporate the above requirements. [ON 11 Apr 12 : Amended as per IDA's Direction.]

5.11 For the avoidance of doubt:-

- (a) where OpenNet discovers any error in the Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers, OpenNet shall inform the Requesting Licensee of the error and the correct Mandated Services Information within one (1) Business Day of OpenNet's discovery of the error;
- (b) where OpenNet is informed of an error in the Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers, OpenNet shall inform the Requesting Licensee of the error and the correct Mandated Services Information within three (3) Business Days of being informed of the error;
- (c) the timeframe to inform the Requesting Licensee of an error in the Mandated Services Information or the correct Mandated Services Information indicated under Clauses 5.11(a) and 5.11(b) shall exclude any delays caused by third parties such as building owners and/or management or end-user, who obstructs OpenNet during OpenNet's site survey or related checks;

CLAUSE 5.11(d) – MODIFICATION REQUIRED

(d) where the Requesting Licensee wishes to cancel the Residential End-User Connection Request due to the error in the Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers, or to change any parameter in the Residential End-User Connection Request for the same reason, OpenNet shall not require the Requesting Licensee to bear the Cancellation Charge specified in Schedule 15 (Charges) or any additional charges in relation to the cancellation or change in parameter(s). The Requesting Licensee shall submit the Cancellation Request due to the error in the Mandated Services Information via the OpenNet Platform, when available; and

IDA Directed Modifications: Comments were received that OpenNet's B2B interface should allow for cancellations as described in this clause 5.11(d), which is currently not the case. After careful consideration, IDA determines that it would result in a more efficient implementation of the ICO to require OpenNet to allow for such cancellations through its automated processes. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 5.11(d) to give effect to the requirement above. JON 11 Apr 12 : Amended as per IDA's Direction.

(e) where OpenNet fails to meet its Service Level Guarantees due to the error in Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers, the Requesting Licensee is entitled to make a claim for the remedy provided by OpenNet pursuant to Clause 2 of this Schedule; however, the Service Level Guarantees shall not apply during the time taken by the Requesting Licensee to consider whether to proceed with the order.

(f) where OpenNet has successfully changed the classification of a premise from a Non-Residential Premise to a Residential Premise upon the request of the Requesting Licensee, any error in the Mandated Services Information shall not apply.

CLAUSE 5.12 – MODIFICATION REQUIRED

5.12 ~~Subject to Clause 5.2, the~~The Requesting Licensee may submit a request to change the scheduled appointment for the installation of the Termination Point. The Requesting Licensee must submit the request at least two (2) Business Days before the original appointment date. For the avoidance of doubt, the applicable Maximum Quota shall be for the Business Day of the re-scheduled appointment.

IDA Directed Modifications: IDA refers to section 12 of the Explanatory Memorandum to this Direction, in relation to the Missed Appointments Charges proposed by OpenNet. IDA notes that this Schedule 1 contains references to “Missed Appointment Charge”. Without limitation to section 12 of the Explanatory Memorandum, OpenNet should remove the references to “Missed Appointment Charge” in this Schedule 1 and propose modifications to clause 5.12 where necessary to meet the requirements set out in section 12 of the Explanatory Memorandum. [ON 11 Apr 12 : Amended as per IDA’s Direction.]

CLAUSE 5.13 – MODIFICATION REQUIRED

5.13 The Requesting Licensee is only allowed to change the appointment to an ~~later~~ available date, which shall be at minimum ~~of~~ three (3) Business Days ~~from~~ the Request for change of appointment date.

IDA Directed Modifications: IDA notes that there may be a possibility that an Requesting Licensee may want to change the appointment date of an order to an earlier date and this may be possible if the order/appointment has been lodged in advance (e.g., 4 weeks in advance). IDA is of the view that the above should be allowed so long as the proposed new appointment date is at least a certain number of days later than the Request for change of appointment date which would still enable OpenNet to provision the service within the SAP. Accordingly, IDA directs OpenNet to propose, for IDA’s approval, modifications to clause 5.13 to comply with the above. [ON 11 Apr 12 : Amended as per IDA’s Direction.]

CLAUSE 5.14 – MODIFICATION REQUIRED

~~5.14 — The Missed Appointment Charge as set out in accordance with Schedule 15 (Charges) shall be applicable should the Requesting Licensee fail to inform OpenNet of the changes in appointment date in accordance with clause 5.12.~~

IDA Directed Modifications: IDA refers to section 12 of the Explanatory Memorandum to this Direction, in relation to the Missed Appointment Charges proposed by OpenNet. Accordingly, IDA directs OpenNet to propose, for IDA’s approval, modifications to clause 5.14 to comply with the above. [ON 11 Apr 12 : Amended as per IDA’s Direction.]

CLAUSE 6 – MODIFICATION REQUIRED

6.2. DELIVERY

IDA Directed Modifications: IDA refers to section 9 of the Explanatory Memorandum to this Direction, in relation to the timely status updates of any delays. Accordingly, IDA directs OpenNet to propose, for IDA’s consideration, modifications to clause 6 to comply with the above.

[ON 11 Apr 12 : Amended as per IDA’s Direction.]

CLAUSES 6.1 AND 6.2 – MODIFICATION REQUIRED

6.1 Subject to clauses 5.2, 5.3, 5.4 and 6.2, OpenNet shall provide the Residential End-User Connection by the end of three (3) Business Days or, where applicable, a later date selected by the Requesting Licensee from the receipt of a valid Request from the Requesting Licensee, where OpenNet has deployed its Network to the Distribution Point, Final Distribution Point or First Termination Point of the Residential Premise. OpenNet shall use its reasonable endeavours to install the First or, where necessary, the Second Termination Point of the Residential Premise during the Requesting Licensee’s preferred session.

6.2 Where there is Insufficient Capacity to provide the Residential End-User Connection, OpenNet shall subject to clause 5.2 provide the Residential End-User Connection:

(a) within ten (10) Business Days from the receipt of a valid Request from the Requesting Licensee if additional capacity is required to be installed between the FTTB Node of the Residential Premise and the First or Second Termination Point of the Residential Premise; or

(b) within forty (40) Business Days from the receipt of a valid Request from the Requesting Licensee if additional capacity is required to be installed between the designated Central Office and the First or Second Termination Point of the Residential Premise.

OpenNet shall use its reasonable endeavours to install the First or, where necessary, the Second Termination Point of the Residential Premise during the Requesting Licensee’s preferred session.

(a) Where there is a delay during service provisioning, the reasons for the delay and the estimated/revised timeframe required to complete service

provisioning will be made available on the OpenNet Platform. In certain instances, OpenNet may, through the OpenNet Platform, request the Requesting Licensee to arrange with the End User a reappointment after the delay is resolved. The Requesting Licensee may either arrange the reappointment or in the alternative, cancel the Request without charges in the event of insufficient capacity, through OpenNet Platform when available.

IDA Directed Modifications: IDA refers OpenNet to its directed modifications to clause 5.5. Accordingly, IDA directs OpenNet to propose, for IDA’s approval, any consequential modifications to clauses 6.1 and 6.2 to comply with the above. [ON 11 Apr 12 : Amended as per IDA’s Direction.]

CLAUSE 6.3 – MODIFICATION REQUIRED

6.3 Where the home owner has previously refused OpenNet’s entry to the premise, OpenNet will provide internal cabling within the Residential Premise using PVC trunking up to a maximum distance of 15 metres to the First Termination Point, measured from the point of entry to the Residential Premise to the First Termination Point. If the owner of a Residential Premise requests the installation of internal cabling that exceeds 15 metres and/or requires the use of deployment technique other than open ducting, OpenNet shall inform the Requesting Licensee and both parties shall mutually agree to a revised implementation timeline which shall not be subject to the provisioning Service Level Guarantee. The Requesting Licensee shall pay the additional charges for installation of internal cabling which exceeds 15 metres in accordance to Schedule 15 (Charges). For the avoidance of doubt, where the owner of a Residential Premise requires the use of deployment technique other than open ducting, such deployment shall be provided by a third party. The Requesting Licensee may download the applicable Service Report Form(s) (“SRF”) from the Service Portal, when available. The final charge would be reflected in OpenNet’s Invoice to the Requesting Licensee.

IDA Directed Modifications: One respondent commented that if OpenNet requires the Requesting Licensee to bill on its behalf, OpenNet should provide the final charge as well as supporting document upon the completion of the order. IDA has carefully considered and agreed that the above would enable Requesting Licensee to promptly and correctly bill the end-user. Accordingly, IDA directs OpenNet to propose, for IDA’s

approval, modifications to clause 6.3 to incorporate the above. ION 11 Apr 12 : Amended as per IDA's Direction.

- 6.4 Unless otherwise stated, OpenNet shall retain the responsibility for working at OpenNet's FDF at the Central Office and Building MDF Room, FTTB Node and First Termination Point, including Patching Service at OpenNet's FDF at the Central Office, Building MDF Room and FTTB Node in accordance with Schedule 13 on Patching Services. The Requesting Licensee shall bear the Charges for such work carried out by OpenNet.
- 6.5 Where the Requesting Licensee requests Residential End-User Connection for the purpose of providing OE services to the End-User, OpenNet will provide the necessary Patching Service at OpenNet's FDF in the Building MDF Room using Patch Cable of not exceeding ten (10) metres in length. The Requesting Licensee shall provide its own Patch Cable if it requires a longer Patch Cable. For the avoidance of doubt, where the Requesting Licensee provides its own Patch Cable, OpenNet will not offer and Requesting Licensee shall not request for any rebate or discount over the Patching Service or the Residential End-User Connection.
- 6.6 OpenNet will use optical fibre cable based on the ITU-T G.652D standard for outdoor installations and the ITU-T G.657A standard for in-building installations (where applicable) to deliver the Residential End-User Connection.
- 6.7 OpenNet shall ensure that the optical power loss:
- (a) of any Residential End-User Connection for the purpose of provision of GPON services does not exceed -28dB; and
 - (b) of any Residential End-User Connection for the purpose of provision of OE services does not exceed -20 dB from OpenNet's FDF in the Central Office or the Requesting Licensee's FDF at the Central Office designated by OpenNet to OpenNet's FDF in the Building MDF Room, and does not exceed -20dB from OpenNet's FDF in the Building MDF Room to the First Termination Point of the Residential Premise.
- 6.8 OpenNet shall promptly notify the Requesting Licensee upon the completion of the Residential End-User Connection.
- 6.9 Subject to clause 6.10, in the event OpenNet fails to meet the applicable service activation period for a Request, OpenNet shall compensate the Requesting Licensee an amount equal to the number of days of delay multiplied by the weekly recurring

charge for the Residential End-User Connection, subject to a maximum of 30 times the weekly recurring charge for the Residential End-User Connection (**Weekly Recurring Charge**), where:

Weekly Recurring Charge = Monthly recurring charge x 7 / 30

CLAUSE 6.10 – MODIFICATION REQUIRED

6.10 OpenNet shall not be required to compensate the Requesting Licensee under any of the following circumstances:

- (a) Delay in the granting of permission from or permission is not granted by the building owners/management or house owner or End-User to install the required Network to the Residential Premise within the said building. In the event the Requesting Licensee raise a dispute questioning OpenNet's effort in remedying the obstruction, OpenNet will provide such evidence as may be available of its best endeavours;
- (b) Where the owner of a Residential Premise requests the installation of internal cabling that requires more than 15 metres of ducting and/or requires the use of a deployment technique other than open ducting;
- (c) The Requesting Licensee requests the deferment of the service activation date; or
- (d) In the event of any obstruction from building owner or building management to OpenNet's installation or installation schedule or any of the circumstances described in Clauses 2.6(e) and 2.6(f) above during the express service activation, OpenNet shall use its best endeavours to remedy it expeditiously. The Requesting Licensee hereby acknowledges and agrees that OpenNet shall not be held liable for any delays upon OpenNet's best endeavours in attempting to resolve any obstruction from building owner or building management. In the event the Requesting Licensee raise a dispute questioning OpenNet's effort in remedying the obstruction, OpenNet will provide such evidence as may be available of its best endeavours;
- ~~(d)(e)~~ The building which was initially under network coverage has been reconstructed and OpenNet has to reinstall its Network to the building.

For the avoidance of doubt, where the service activation date has been revised pursuant to any of the circumstances contemplated in this clause 6.11 or elsewhere in

the ICO Agreement (unless otherwise stated), OpenNet shall nevertheless be required to compensate the Requesting Licensee if it fails to meet the revised implementation timeline.

IDA Directed Modifications: Clause 6.10 sets out several circumstances under which OpenNet would not be required to compensate Requesting Licensees.

IDA received a number of comments concerning this clause. In particular, it was suggested that clause 6.10(a) should be subject to two requirements: (a) OpenNet must have used its best endeavours to obtain any licence or permission expeditiously; and (b) OpenNet must provide Requesting Licensees with evidence of such licence/permission, the steps taken to obtain it expeditiously and why OpenNet cannot obtain the licence/permission.

After careful consideration, IDA agrees that OpenNet should be required to use its best endeavours to obtain expeditiously the necessary licences or permission mentioned in clause 6.10(a). However, IDA is of the view that it is not necessary to require OpenNet to furnish evidence of this in every case. Instead, it would be more efficient if OpenNet were required to furnish evidence only in the event that a challenge or dispute is raised by Requesting Licensees as to whether OpenNet has used its best endeavours in the manner described above.

Accordingly, IDA directs OpenNet to propose, for IDA's approval, -modifications to clause 6.10(a) to incorporate the above requirements.

[ON 11 Apr 12 : Amended as per IDA's Direction.]

CLAUSE 6.11 – MODIFICATION REQUIRED

6.11 The Requesting Licensee may submit a Request for express service activation period of one (1) Business Day for the provision of a Residential End-User Connection via OpenNet Platform, when available. The OpenNet Platform will provide the available slots for express service which will be distinguishable from slots available for normal service. All Request for express service activation shall be subject to the following conditions:

IDA Directed Modifications: As proposed, OpenNet's express service activation is currently limited to 40 Requests per day. It was commented

that no provision has been made for OpenNet's B2B and Portal to display the number of remaining available slots within OpenNet's order management process, and that the ICO should make provision for this. It was also commented that if OpenNet is unable to meet the express service SAP, OpenNet should not be allowed to impose any "express service" Charges, but only "normal service" charges.

After careful consideration, IDA is of the view that there is merit in the comment above. IDA therefore considers that it is reasonable to require OpenNet to clarify in its ICO the following points:

- (a) how OpenNet would make available the information on available slots for express service at the point of ordering. The slots for express service must also be clearly distinguishable in OpenNet Platform and during the B2B transactions; [ON 11 Apr 12 : Amended as per IDA's Direction.]**
- (b) how OpenNet would address the situation where it is not able to provision the express service within 1 Business Day due to OpenNet's fault. In this regard, IDA's considers that it would be reasonable for OpenNet to: (i) impose a discounted one-time fee, (ii) offer a rebate, or (iii) both; and**
- (c) how OpenNet would address the situation where it is only able to provision the express service on or after the 3 Business Day due to OpenNet's fault. In this regard, IDA's considers that it would be reasonable for OpenNet to only impose "normal service" charges and that Service Level Guarantees for "normal service" shall apply.**

Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 6.11 to incorporate the above requirements.

[ON 11 Apr 12 : Amended as per IDA's Direction.]

CLAUSE 6.11(a) – MODIFICATION REQUIRED

- (a) —OpenNet's fibre network has already been rolled out from the Central Office to the serving cabinet and from the serving cabinet to the First Termination Point in the Residential Premise (which must already been installed and where the location of the First Termination Point remained unchanged). Where the Request is submitted via**

the OpenNet Platform, when available, the OpenNet Platform will also indicate if the particular premise is eligible for express service.;

IDA Directed Modifications: It was commented that OpenNet should indicate via B2B whether a particular address is available for express service as part of its feasibility check. After careful consideration, IDA agrees that this would result in a more efficient implementation of the ICO. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 6.11(a) to incorporate the above suggestion.

[ON 11 Apr 12 : Amended as per IDA's Direction.]

- (b) The maximum number of Requests for express service activation is limited to forty (40) per day from all Requesting Licensees for all services, which must fall within the Maximum Quota;

CLAUSE 6.11(c) – MODIFICATION REQUIRED

- (c) There is a daily cut off-time of ~~10am~~ 12pm for the Requesting Licensee to submit Requests for express service activation. All Requests for express service activation received by ~~12pm~~ 12pm daily will be provisioned by the next Business Day. Any Requests for express service activation received after ~~12pm~~ 12pm daily will be provisioned two (2) Business Days later;

IDA Directed Modifications: Comments were received that the 10 am cut-off time is impractical, and that OpenNet should offer a more practical and useful timeframe for the Requesting Licensees to submit their Requests for express service activation. After careful consideration, IDA agrees that there is merit to require OpenNet to extend the cut-off time so as to allow for more flexibility in express service activation. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 6.11(c) to provide for the daily cut-off time to be extended to a more appropriate time. For the purposes of the above, IDA considers that a cut-off time of 12 noon would be more reasonable.

[ON 11 Apr 12 : Amended as per IDA's Direction.]

CLAUSE 6.11(d) – MODIFICATION REQUIRED

- (d) The Requesting Licensee hereby acknowledges and agrees that OpenNet shall not be held liable for any delays where OpenNet has exercised its best endeavours in its attempt to remedy ~~if there is~~ any obstructions from building

owner, building management, home owner or End-User to OpenNet's installation or installation schedule or any of the circumstances described in Clauses 2.6(e) and 2.6(f) above during the express service activation. In the event the Requesting Licensee raise a dispute questioning OpenNet's effort in remedying the obstruction, OpenNet will provide the such evidence as may be available of its best endeavours ;

IDA Directed Modifications: It was commented that since the express service is only offered for "homes reached" premises, it is unlikely for OpenNet to face obstruction from building owners, building management and End-Users. Further, it was suggested that two additional requirements be imposed: (a) OpenNet must have used its best endeavours to remedy any obstruction expeditiously, and (b) OpenNet must provide Requesting Licensees with evidence of such obstruction, the steps taken to remedy it expeditiously and why OpenNet cannot remedy the obstruction.

IDA has carefully considered the situation, and is of the view that there may be genuine circumstances in which OpenNet may face obstruction from building owners and building management. However, where there is genuine obstruction, OpenNet must be required to use its best endeavours to remedy it expeditiously.

IDA is also of the view that it is not necessary to require OpenNet to furnish evidence in every case of obstruction. Instead, it would be more efficient if OpenNet were required to furnish evidence only in the event that a challenge or dispute is raised by Requesting Licensees as to whether OpenNet has used its best endeavours to expeditiously remedy the obstruction.

Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 6.11(d) to incorporate the above requirements.

[ON 11 Apr 12 : Amended as per IDA's Direction.]

- (e) OpenNet shall only provision Requests for express service activation which meet the conditions stated in (a) and (b) above, and will reject the Request for express service activation if any of the conditions in (a) and (b) above or, if applicable, as specified in clauses 5.3 and 5.4 above are not met. The Requesting Licensee shall pay an Express Service Activation Request Charge in accordance with Schedule 15 (Charges);

- (f) The cancellation charge set out in accordance with Schedule 15 (Charges) shall be applicable should the Requesting Licensee cancel the Request for express service activation after acceptance by OpenNet of such Request; and

CLAUSE 6.11(g) – MODIFICATION REQUIRED

- (g) Subject to clauses 6.7 and 6A, ~~The provisioning of the Request for express service activation will only cover patching in Serving Cabinet and/or Central Office by OpenNet. OpenNet will not conduct any testing during patching in the Serving Cabinet (from Serving Cabinet to first Termination Point).~~ The power meter measurement will be performed during patching at Central Office (from Central Office to MDF).

- (h) In the event OpenNet is unable to provision the express service within one (1) Business Day due to OpenNet's fault, OpenNet will not charge the additional express service charge, but impose charges applicable for normal installation service as stated in Schedule 15 (Charges) and shall provision the Request within three (3) Business Days. If the provisioning delay persist beyond three (3) Business Days, SLG shall apply starting from the third (3rd) Business Days after the date of Request.

6.12 If there is an undue delay for more than two (2) weeks from the date of Request due to OpenNet's fault, the Requesting Licensee shall be allowed to cancel without incurring cancellation charges.

IDA Directed Modifications: Comments were received that End-Users should not accept a lower quality of service (i.e., reduced testing obligations on OpenNet) just because they request for express service activation. In addition, as currently drafted, clause 6.11(g) fails to provide details of OpenNet's applicable testing measurements.

IDA agrees with these concerns and considers that, at a minimum, OpenNet must still comply with the following in respect of express service activation: (a) the optical power limits set out in clause 6.7; and (b) joint investigation of faults under clause 6A.

Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 6.11(g) to provide expressly that OpenNet will comply with the above requirements in relation to express service activation. [ON 11 Apr 12 : Amended as per IDA's Direction.]

[ON 11 Apr 12 : ON had included a new clause 6.12 to address IDA's Directed Modifications under Section 3 of the Ex-Memo.]

6A. JOINT INVESTIGATION OF FAULTS

- 6A.1 If any faults occur during the Requesting Licensee's initial installation of its equipment for the Residential End-User Connection, the Requesting Licensee shall first perform all necessary checks (which shall be at its own cost) to ensure that such fault does not lie within the Requesting Licensee's network. For the avoidance of doubt, this Clause 6A shall only apply when the Requesting Licensee's installation of its equipment takes place within seven (7) calendar days (excluding Sundays and Public Holidays) from OpenNet's handover of the First Termination Point to the Requesting Licensee.
- 6A.2 Where the Requesting Licensee has performed all necessary checks (which shall be at its own cost) to ensure that such fault does not lie within the Requesting Licensee's network, the Requesting Licensee may inform OpenNet and OpenNet shall send a representative to the relevant Residential Premise for a joint investigation with the Requesting Licensee. OpenNet shall use its best endeavours to ensure that such representative shall arrive at the Residential Premise within one (1) hour from the receipt of such request from the Requesting Licensee. Notwithstanding anything in this Clause 6A to the contrary, the Requesting Licensee may only request for a joint investigation between 9am and 7pm from Mondays to Saturdays, and may not request for a joint investigation on Sundays and Public Holidays.
- 6A.3 OpenNet and the Requesting Licensee shall ensure that their representatives are present throughout such joint investigation process. Upon completion of such joint investigation, the OpenNet and Requesting Licensee representatives shall jointly sign off on an investigation report. The format of such investigation report shall consist of readings, and actions taken by OpenNet during the joint fault investigation.
- 6A.4 Where the joint investigation shows that the fault is not due to the Requesting Licensee's network, OpenNet shall delay the billing start date for such Residential End-User Connection to the time such fault is rectified. The fault shall be deemed to have been rectified when OpenNet provides a confirmation to the Requesting Licensee that the Residential End-User Connection has been restored. In the event that the joint investigation team encounters a delay in fault rectification due to any applicable circumstances stated in Clause 2.6 above, the billing start date shall be adjusted to exclude the delays attributable to the applicable circumstances stated in Clause 2.6.

CLAUSE 6A.5 – MODIFICATION REQUIRED

- 6A.5 If OpenNet fails to repair an installation-related fault within seventy-two (72) hours from the commencement of the joint investigation, the Requesting Licensee may elect

to cancel such faulty Residential End-User Connection either manually or via the OpenNet Platform when available. OpenNet shall waive the cancellation charge and Installation Charge of the Termination Point if the Requesting Licensee submits OpenNet's standard cancellation form (as per Annex 1B) to OpenNet after seventy-two (72) hours from the commencement of the joint investigation but before the fault is rectified.

IDA Directed Modifications: As currently drafted, clause 6A.5 provides for the cancellation charge to be waived when OpenNet fails to repair an installation-related fault within 72 hours of commencing the joint investigation. One respondent commented that OpenNet should support the non-chargeable cancellation scenario on its B2B and portal. Another respondent commented that it is insufficient for OpenNet to waive only the cancellation charge, and that all relevant charges related to installation of the Termination Point should be waived. It was further commented that in such cases, OpenNet should make good the condition of the customer's premise at no charge.

IDA has reviewed the comment and agreed that:

- (a) It is reasonable to require OpenNet to support such cancellation scenario in its Platform and via B2B transactions; and**
- (b) To avoid dispute and for certainty, IDA considers that it would be helpful if OpenNet were to clarify the applicable charges that would be imposed and/or waived under the scenario described in clause 6A.5.**

IDA is however of the view that it is unreasonable to insist OpenNet to make good the condition of the customer's premise. The reason that is given time, OpenNet would have resolve the fault at the premise.

Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 6A.5 to clarify the above. [ON 11 Apr 12 : Amended as per IDA's Direction.]

6A.6 For the avoidance of doubt, the Requesting Licensee shall not be entitled to make any SLA or MTTR claims for such Residential End-User Connection for the duration of such joint investigation (including but not limited to the time taken to resolve any fault found).

7. RESPONSIBILITY AT DP AND OPENNET FDF

- 7.1 The Requesting Licensee shall not, and shall ensure that its employees, agents and contractors do not, at any time access OpenNet's FDF at the Central Office and Building MDF Room, the FTTB Node and the Distribution Point.
- 7.2 Where the Requesting Licensee wishes to change the existing patching connection at OpenNet's FDF at the Central Office or Building MDF Room, the Requesting Licensee shall submit applications for termination of existing Patching Service and an order for new Patching Service at the Central Office or Building MDF Room in accordance with Schedule 13 (Patching Service).

8. DEACTIVATION

CLAUSE 8.1 – MODIFICATION REQUIRED

- 8.1 Subject to the minimum contract term, the Requesting Licensee may deactivate the Residential End-User Connection by giving OpenNet a Request not less than three (3) Business Days in accordance to Schedule 13 (Patching). Additionally where OpenNet performs a Fibre Takeover Handover pursuant to clause 20, the Existing Requesting Licensee shall remain liable for the minimum contract term.

IDA Directed Modifications: IDA refers OpenNet to its directed modifications to clause 20 below. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 8.1 as a consequence to the directed modifications to clause 20. [ON 11 Apr 12 : ON had proposed a revised process for Fibre Handover as per clause 20. Hence, ON is not deleting the last statement under clause 8.1.

ON had proposed to insert "in accordance to Schedule 13" under the first statement to be aligned to IDA's Direction on Maximum Quota.]

CLAUSE 8.2 – APPROVED

- 8.2 The cancellation of the Request for deactivation shall be submitted to OpenNet at least one (1) Business Day before the date of the deactivation of the Residential End-User Connection.
- 8.3 If the Residential End-User Connection service is terminated by the Requesting Licensee pursuant to clause 8.1 before the expiry date of the minimum contract term,

the Requesting Licensee must pay OpenNet one hundred percent (100%) of the Monthly Recurring Charge for the remainder of the minimum contract term.

CLAUSE 8.4 – MODIFICATION REQUIRED

- 8.4 Where any Patching Service is no longer required as a result of the termination of the Residential End-User Connection, OpenNet shall remove the Patching Service at all the relevant access points and the Requesting Licensee shall be liable for the termination charges for removing the Patching Service at the Central Office designated by OpenNet in accordance with Schedule 15 (Charges). Notwithstanding the above, the Requesting Licensee shall not be liable to pay any Charges for the removal of Patching Service related to or in connection with the termination of the Residential End-User Connection, if such termination is the result of OpenNet's fault.

IDA Directed Modifications: IDA refers OpenNet to section 2 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 8.4 to reinstate the deletion. [ON 11 Apr 12 : Amended as per IDA's Direction.]

9. STANDARD TERMS AND CONDITIONS

CLAUSE 9.1 – MODIFICATION REQUIRED

- 9.1 OpenNet shall at its sole discretion determine its network deployment, including but not limited to the access points, fibre cable routing and location of the Central Office, Building MDF Room, FTTB Node, Distribution Point and ~~First~~ Termination Point from which the Residential End-User Connection is provided. Prior to installation of the Termination Point, OpenNet will assess the location's suitability for the deployment of active equipment, with adequate ventilation and power. Notwithstanding, OpenNet's assessment and recommendation on location of the Termination Point, OpenNet shall defer to the agreement or instructions of the End-User. The Requesting Licensee, its agents or sub contractors shall not tamper with, modify, remove or re-locate any Termination Point or any part of the Network in any way or take steps to repair any Termination Point or any part of the Network.

IDA Directed Modifications: Comments were received that clause 9.1 as drafted gives OpenNet very wide discretion to determine its network deployment and this may result in Termination Points being installed in unsuitable locations.

To address the concern, IDA considers that it would be reasonable to require OpenNet to take into account the suitability of locations for the installation of Termination Points. In general, Termination Points should be located where they can accommodate the deployment of active equipment, with adequate ventilation and power points within the reach of active equipment. Notwithstanding, IDA also recognises that the location of the Termination Point would ultimately be dependent on the choice of the End-User.

Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 9.1 to: (a) give effect to the requirement that OpenNet will consider the suitability of a location (as described above) before a Termination Point is installed; and (b) state that the location of a Termination Point is ultimately subject to the choice of the End-User.
[ON 11 Apr 12 : Amended as per IDA's Direction.]

9.2 OpenNet shall be responsible for the maintenance of the Residential End-User Connection installed under this Schedule. .

CLAUSE 9.3 – MODIFICATION REQUIRED

9.3 Except to the extent strictly necessary to accurately describe the service to actual_or potential Customers, the Requesting Licensee shall not use OpenNet's name, any OpenNet's trademarks or the fact that any service is supplied using OpenNet's Network in promoting the Requesting Licensee's service.

IDA Directed Modifications: IDA notes that OpenNet made a formatting error in clause 9.3 with "actualor" and directs OpenNet to correct the above error. [ON 11 Apr 12 : Amended as per IDA's Direction.]

9.4 The Parties shall in good faith co-operate with each other and take reasonable measures to ensure that there is no interference with or deterioration to OpenNet's existing services or those of a Third Party as a result of the Requesting Licensee's use of the Residential End-User Connection.

9.5 If it is necessary to carry out any scheduled service interruption, including but not limited to planned repair, or replacement or upgrade to any equipment or facility forming part of the Residential End-User Connection, OpenNet shall provide the Requesting Licensee with at least one (1) month's **written** notice in advance of such

interruptions, repairs or upgrades, and shall inform Requesting Licensees of the period of service interruption. OpenNet shall take reasonable measures to minimise any service disruption to the Requesting Licensee.

CLAUSE 9.6 – MODIFICATION REQUIRED

9.6 OpenNet shall include the following details in the written notification or via the OpenNet Platform APIs to the Requesting Licensee :

- (a) Affected Location;
- (b) Date of occurrence;
- (c) Time of occurrence (start & end timings);
- (d) Cause of Planned Disruption;
- (e) Order Request Identifier of the affected orders; and
- (f) OpenNet's Network Operations Centre Contact Number.

~~The Requesting Licensee is required to acknowledge receipt of OpenNet's notification within one (1) Business Day.~~

IDA Directed Modifications: Comments were received that there is no justifiable reason for OpenNet to require the Requesting Licensee to acknowledge receipt of its notification within one Business Day.

In this regard, IDA requires OpenNet to provide justification as to why it requires the Requesting Licensee to acknowledge the request in the first place, as well as the short timeframe of only one Business Day. If OpenNet is unable to provide valid justification, IDA may further direct that this requirement to provide notice be removed altogether or subject to a more reasonable period. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 9.6 to address the above. ON 11 Apr 12 : Amended as per IDA's Direction.

9.7 If the scheduled service interruption affects Residential End-User Connections, OpenNet will carry out the scheduled service interruption between 1:00am and 6:00am, unless it is not feasible for OpenNet to do so.

- 9.8 Subject to Requesting Licensee acquiring redundancy service, OpenNet shall, where technically feasible, provide assistance to Requesting Licensee to divert its Residential End-User Connection to the redundancy service before commencing the scheduled service interruption.
- 9.9 Where there are available resources, OpenNet will, where possible, first divert critical links to alternative routings before commencing the scheduled service interruption.
- 9.10 Subject to clause 9.6, OpenNet shall not be liable for any loss caused by such scheduled service interruption, except for any Service Level Guarantee rebate that arises from OpenNet carrying out the scheduled service interruption outside of the stipulated period and the Requesting Licensee has reported the fault in accordance to clause 11.
- 9.11 The Requesting Licensee shall be responsible to the Requesting Licensee's Customers for all aspects of the Requesting Licensee's services including but not limited to the operations and maintenance of the Requesting Licensee's service.
- 9.12 The Requesting Licensee must procure and maintain at its own cost:
- (a) any equipment or software needed to implement, receive or use the Residential End-User Connection (including but not limited to any configuration of the NTE at the Residential Premise);
 - (b) co-location at the designated Central Office and Building MDF Room; and
 - (c) access to the Residential Premise.

CLAUSE 9.13 – MODIFICATION REQUIRED

- 9.13 Upon receipt by OpenNet of any request from Requesting Licensee for Removal, OpenNet shall check if the First or Second Termination Point is in use by any Requesting Licensee. OpenNet will reject the request if either of the First or Second Termination Point is in use, otherwise OpenNet shall perform such Removal which shall not include removal of any part of the Network, surface trunking and/or ~~T~~ermination ~~p~~Point that are concealed either by a false ceiling, within any furniture or rendered inaccessible. The Requesting Licensee will have to bear the charge for Removal of the ~~€~~Termination ~~P~~point in accordance to Schedule 15 (Charges). End-User shall ensure that OpenNet and/or its Contractor has ease of access to perform such Removal. OpenNet shall use its best endeavours to minimize damage to the wall and/or other fittings save that OpenNet shall not be responsible or liable to move or

shift any furniture or items belonging to End-User, re-plaster the wall, perform any painting works or reinstate the wall and/or other fittings accordingly.

IDA Directed Modifications: IDA notes that “Termination Point” is a defined term in Schedule 18, whereas there are references to “termination point” in this clause 9.13. To ensure clarity and consistency among the provisions of the ICO, OpenNet should replace the term “termination point” with “Termination Point” wherever applicable throughout this ICO.

In addition, comments were received that OpenNet should modify the wording of line 7 of clause 9.13 so as to expressly state that OpenNet would use its “best endeavours” to minimise damage to End-Users’ premises. After careful consideration, IDA agrees that OpenNet must state that it will use its “best endeavours” to minimise such damage.

Further, IDA considers that it would promote clarity by requiring OpenNet to set out the processes that would be applicable in the situation where OpenNet receives a request for Removal but the Termination Point is still in use.

Accordingly, IDA directs OpenNet to propose, for IDA’s approval, modifications to clause 9.13 to provide for the above requirement. [\[ON 11 Apr 12 : Amended as per IDA’s Direction.\]](#)

9.14 Nothing in this Schedule vests in the Requesting Licensee any right, title or proprietary interest in the optical fibre cable, equipment or facilities forming part of the Residential End-User Connection.

CLAUSE 9.15 – MODIFICATION REQUIRED

9.15 Onsite charges are applicable whenever Requesting Licensee requests for OpenNet to be onsite [for any reason\(s\) other than for reasons caused by OpenNet’s fault or error.](#)

IDA Directed Modifications: Comments were received that OpenNet should not be allowed to impose onsite charges in cases where OpenNet needs to be present to provision the service or to be present due to its own fault or error. After careful consideration, IDA agrees that it would be unreasonable for any onsite charge to be imposed under such circumstances as it is not caused by the Requesting Licensee.

Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to this clause 9.15 to give effect to the above requirement.

[ON 11 Apr 12 : Amended as per IDA's Direction.]

10. ACCESS AND APPROVALS REQUIRED

10.1 The Parties shall comply with clause 15.5 of the main body of this ICO Agreement in relation to the obtaining of all licences, permits, consents, waivers, authorisations and intellectual property or other rights required for the provision of the Residential End-User Connection.

11. FAULT REPORTING AND CLEARING

11.1 Each Party must have or establish a Fault Reporting and Control Centre (FCC) to act as a single point of contact for the reporting, management and clearing of faults. The FCC must be available twenty-four (24) hours a day, seven (7) days a week.

CLAUSE 11.2 – APPROVED

11.2 It is the Requesting Licensee's responsibility to determine the source of the fault at its own cost and to ensure that the fault does not lie within its own network before reporting the fault to OpenNet. The Requesting Licensee shall pay OpenNet according to Schedule 15 (Charges) for cancellation of any fault reported regardless of the response or stage of investigation by OpenNet.

CLAUSE 11.3 – MODIFICATION REQUIRED

11.3 Where the fault is reported via the OpenNet Platform, the Requesting Licensee shall indicate the following:

(a) Order Request Identifier

(b) Requesting Licensee Incident ID

(c) Incident type

(d) Description of fault ticket

(e) End User contact details

Upon successful submission of the fault, the OpenNet Platform will provide a fault acknowledgement.

Upon receipt of a fault report from the Requesting Licensee under clause 11.2, OpenNet shall investigate the cause of the fault experienced by the Requesting Licensee in a diligent and responsible manner as would be expected of a competent service provider. OpenNet shall provide periodic updates~~update to~~ the Requesting Licensee on the status of the fault rectification ~~as~~ and also updates when there is a change in status of the fault investigation/rectification work through OpenNet Platform, when available.

IDA Directed Modifications: IDA refers OpenNet to section 9 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 11.3 in the manner specified therein. Without limitation to the foregoing, OpenNet should provide Requesting Licensees with (a) periodic updates on the status of the fault rectification; and (b) updates when there is a change in status of the fault investigation/rectification work. [ON 11 Apr 12 : Amended as per IDA's Direction.]

11.4 If, following investigation, OpenNet determines that the fault is at the Transmission Tie Cable at the Central Office, OpenNet will patch the Residential End-User Connection to another available Transmission Tie Cable Port and charge the Requesting Licensee a Patching Charge in accordance with Schedule 15 (Charges) if the Requesting Licensee was responsible for the fault at the Transmission Tie Cable at the Central Office.

CLAUSE 11.5 – MODIFICATION REQUIRED

11.5 If, following investigation, OpenNet determines that the fault is at the Patch Cable at the Building MDF Room, OpenNet will replace with another Patch Cable(s) and charge the Requesting Licensee a Patching Charge(s) in accordance with Schedule 15 (Charges). ~~OpenNet will charge the Requesting Licensee a Patching Charge~~ if the Requesting Licensee was responsible for the fault at the Patch Cable at the Building MDF Room.

IDA Directed Modifications: IDA notes that as currently drafted, clause 11.5 appears to be unclear in relation to the differing circumstances for Patching Charges. For clarity, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 11.5, to state that Requesting Licensees will only be charged a Patching Charge if they are

responsible for the fault at the Patch Cable at the Building MDF Room.

[ON 11 Apr 12 : Amended as per IDA's Direction.]

11.6 If, following investigation, OpenNet determines that no fault is found or the fault is not due to the OpenNet Network or equipment, then OpenNet shall charge the Requesting Licensee a No Fault Found Charge for the fault report in accordance with Schedule 15 (Charges).

11.7 The process for fault investigation shall be as follows:

CLAUSE 11.7(a) – MODIFICATION REQUIRED

- (a) For each of the three (3) wavelengths of 1310nm, 1490nm and 1550nm, the optical power shall be measured in accordance with clause 6.8 above where possible, and the findings shall be clearly recorded using the "Fault Rectification Service Report" (Annex 1C),

IDA Directed Modifications: Comments were received that power loss should not be the only criterion for "no fault found" as there are numerous scenarios where the Residential End-User Connection could be disrupted due to faults by OpenNet. In particular, it was commented that service may continue to be disrupted even though the fibre reading is within the range due to OpenNet patching the End-User fibre to the wrong splitter.

In this regard, IDA considers that it is reasonable to require OpenNet to propose measures to address the concerns relating to wrong patching. As an example, IDA refers to the first bullet point of clause 11.7(b), and considers that OpenNet could ensure that patching at the MDF and/or CO and the patch cords are properly installed as part of the investigation process before concluding that there is "no fault found".

In addition, IDA notes that the reference to clause 6.8 is incorrect, as the relevant clause providing for optical power is clause 6.7, and requires OpenNet to correct the wrong reference.

Accordingly, IDA directs OpenNet to propose, for IDA's approval, modification to clause 11.7(a) to incorporate the above requirements.

[ON 11 Apr 12 : Amended as per IDA's Direction.]

(b) if the power loss do not exceed the limit specified in clause 6.78 then a ~~finding of “no fault found” will be recorded, otherwise~~ the following steps shall be carried out before a finding of “no fault found” will be recorded:

- determine that the patching at CO/MDF room and the patch cord are properly installed
- determine the optical power at the output of splitter port, for GPON is within acceptable limits

Or determine the optical power at the output of the OE to OpenNet’s FDF in the Building MDF room is within the acceptable limits

- determine that no macro bending that produces high loss
- determine that no dirty/damaged connector
- determine that no fibre cut or damaged Termination Point
- determine that there is no wrong patching
- measurements of the following shall also be taken :
 - optical time-domain reflectometer
 - power loss

CLAUSE 11.7(c) – MODIFICATION REQUIRED

(c) Upon completion of ~~the~~ any joint investigation, OpenNet will hand over the Termination Point to the Requesting Licensee and both Parties shall jointly sign off on the “Fault Rectification Service Report” (Annex 1C), which will state the outcome of the joint investigation. In non-joint investigation, ie where Requesting Licensee is absent despite notification from OpenNet, OpenNet shall conclude the investigation on-site and inform the Requesting Licensee of the outcome accordingly which Requesting Licensee shall not dispute. OpenNet shall provide periodic updates to the Requesting Licensee on the status of the non-joint investigation and also updates when there is a change in status of the non-joint investigation through OpenNet Platform, when available.

IDA Directed Modifications: Comments were received that as currently drafted, clause 11.7(c) can be read to imply that a joint investigation is always required for the process of fault investigation, whereas this is not always the case. In addition, OpenNet should only require the Requesting Licensee to jointly sign off on the “Fault Rectification Service Report” if both parties are present onsite for fault rectification.

IDA agrees that joint investigations are not required for every case. The resources required to co-ordinate and carry out a joint investigation would likely be more onerous and burdensome than a non-joint investigation. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modification to clause 11.7(c) to clarify that the proposed process is also applicable to non-joint investigation or to provide for an additional process in relation to non-joint investigation.

In addition, IDA refers OpenNet to section 9 of the Explanatory Memorandum to this Direction. IDA reminds OpenNet that it is required to provide timely status updates to Requesting Licensees, and without limitation to the foregoing, OpenNet must inform Requesting Licensees of the cause of the fault when it resolves the fault.

CLAUSE 11.8 – MODIFICATION REQUIRED

11.8 If OpenNet is unable to identify any fault, OpenNet will call for a fault identification coordination meeting between OpenNet and the Requesting Licensee to identify the fault. The OpenNet Platform will notify the Requesting Licensee on the request for fault identification. The Requesting Licensee shall provide all reasonable assistance requested by OpenNet. Each Party is to bear its own cost for attending with reference to clause 11.10 such fault identification coordination meeting as well as any testing or trouble-shooting activities required as a result of such a meeting. For the avoidance of doubt, save as provided below, each party shall bear its own costs for the purpose of any fault investigation:

IDA Directed Modifications: IDA notes that clauses 11.8(a)-(c) apply to both fault identification coordination meetings initiated by OpenNet and joint investigations initiated by Requesting Licensees. For clarity, IDA requires OpenNet to propose, for IDA's approval, modifications to clause 11.8 to state that clauses 11.8(a)-(c) will also apply to joint investigations under clause 11.10. [ON 11 Apr 12 : Amended as per IDA's Direction. Please refer to clause 11.10.]

- (a) In the event that a particular fault is due to OpenNet or its contractors, OpenNet shall not impose any charge on the Requesting Licensee for access to the Co-Location Space (where applicable), regardless of whether it is an OpenNet-initiated fault identification coordination meeting or a Requesting Licensee-initiated joint investigation process. In addition, OpenNet shall not impose the joint investigation charge on the Requesting Licensee even if the fault identification process is initiated by the Requesting Licensee.

- (b) In the event that a particular fault is due to the Requesting Licensee or its contractors or its End-Users, OpenNet shall be entitled to impose a charge on the Requesting Licensee for access to the Co-Location Space (where applicable), regardless of whether it is an OpenNet-initiated fault identification coordination meeting or an Requesting Licensee-initiated joint investigation process. In addition, OpenNet shall also be entitled to impose the joint investigation charge on the Requesting Licensee if the fault identification process is initiated by the Requesting Licensee.
- (c) In the event that it is agreed that a particular fault is not due to OpenNet (or its contractors) or the Requesting Licensee (or its contractors or End-Users), OpenNet shall be entitled to impose a charge on the Requesting Licensee for access to the Co-Location Space (where applicable) only if it is an Requesting Licensee-initiated joint investigation process. In addition, OpenNet shall also be entitled to impose the joint investigation charge on the Requesting Licensee if the process was initiated by the Requesting Licensee.

CLAUSE 11.8(d) – MODIFICATION REQUIRED

- (d) Except for (a) above, if it is discovered that any part of the Network located ~~in~~ in the Residential Premise is damaged, OpenNet shall impose the Requesting Licensee shall be liable to OpenNet for the relevant charges in accordance to Schedule 15 (Charges) accordingly to the End-User unless the damage is caused by the Requesting Licensee.

IDA Directed Modifications: Comments were received that as OpenNet is solely responsible for its Network, any damage to OpenNet’s Network in the Residential Premise is beyond the Requesting Licensee’s or Retail Service Provider’s control.

In this regard, IDA agrees that since the Requesting Licensee and its contractors are not permitted to tamper with or repair any part of the Network located on the Residential Premise, there is no basis for Requesting Licensee to be made liable to OpenNet for such damage to the Network, unless it can be proven that Requesting Licensee had caused the damage.

In view of the above, IDA requires OpenNet to deal with the End-User directly for any damage to the Termination Point unless such damage is caused by the Requesting Licensee. Accordingly, IDA directs OpenNet to propose, for IDA’s approval, modification to clause 11.8(d) to comply

with the above requirement. [ON 11 Apr 12 : Amended as per IDA's Direction.]

11.9 The Residential End-User Connection is deemed to be restored when OpenNet has tested and confirmed to the Requesting Licensee that the Residential End-User Connection has been restored. The OpenNet Platform will notify the Requesting Licensee with the cause of fault.

CLAUSE 11.10 – MODIFICATION REQUIRED

11.10 Where the Requesting Licensee has lodged with OpenNet a fault report and OpenNet is in the process of investigating the fault or where the Requesting Licensee has not lodged a fault report but suspect that there is a fault on the Residential End-User Connection, the Requesting Licensee may request OpenNet for a joint investigation. Additionally, where the Requesting Licensee disputes OpenNet's findings, the Requesting Licensee shall request OpenNet for a joint investigation. The Requesting Licensee shall propose the date, time and venue for the joint investigation. Subject to OpenNet's resource availability and agreement to the date, time and venue, OpenNet shall attend the joint investigation and charge the Requesting Licensee the Joint Investigation Charge according to Schedule 15 (Charges), if the fault is not with OpenNet, otherwise OpenNet will waive the Joint Investigation Charge. ~~Where the Requesting Licensee changed the appointment for the joint investigation without giving OpenNet sufficient notice of at least one (1) Business Day, the Requesting Licensee shall pay OpenNet the Missed Appointment Charge in accordance with Schedule 15 (Charges).~~ The process for a joint investigation shall be as described in clause 11.7. Clauses 11.8(a) to (c) will also apply to joint investigations under clause 11.10. Additionally, where the Requesting Licensee disputes OpenNet's findings, the Requesting Licensee may request OpenNet for a fault identification coordination meeting.

IDA Directed Modifications: IDA refers OpenNet to its directed modifications to clause 11.8 above. For consistency, IDA directs OpenNet to propose, for IDA's approval, modifications to state that clauses 11.8(a)-(c) will apply to joint investigations under clause 11.10.

[ON 11 Apr 12 : Amended as per IDA's Direction.]

While IDA agrees that there should be a process available for Requesting Licensees to raise any disagreements with the findings of OpenNet's fault investigations, IDA disagrees that such a process should be treated as a joint investigation process. IDA's view is that it is

more reasonable for OpenNet to resolve such disagreement through the fault identification coordination meeting. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 11.10 to provide for the above process. [ON 11 Apr 12 : Amended as per IDA's Direction.]

Further, IDA refers OpenNet to section 12 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 11.10 in the manner specified therein. Without limitation to the above, OpenNet should remove all references to Missed Appointment Charges. [ON 11 Apr 12 : Amended as per IDA's Direction.]

11.11 The Requesting Licensee acknowledges that OpenNet may temporarily disconnect the Requesting Licensee's Residential End-User Connection to perform reasonable fault analysis and line testing on the Residential End-User Connection. OpenNet shall conduct such disconnection only as it reasonably considers necessary. OpenNet shall notify the Requesting Licensee at least thirty (30) minutes before the temporary disconnection and provide its reasons for the temporary disconnection.

11.12 Each Party shall maintain and store its own records of faults and repairs.

Mean Time To Recovery

11.13 OpenNet shall restore any fault within a standard Mean Time To Recovery (MTTR) of eight (8) hours.

11.14 Subject to clause 2.6, the MTTR shall be the average time OpenNet took to restore service for all fault incidents for all Residential End-User Connections acquired by the Requesting Licensee under this Schedule during a month, measured from the time each fault is reported by the Requesting Licensee to the time OpenNet confirms that the fault is restored, excluding fault incidents where OpenNet is prevented or restricted from restoring the service owing to matters that are not within OpenNet's control. For the avoidance of doubt, the MTTR is calculated as follows:

$$\frac{\sum X}{Y}$$

Where X = Time taken to restore fault incidents for each Residential End-User Connection during a month as described above

Y = Total number of affected Residential End-User Connections in the same month

11.15 In the event OpenNet fails to meet the standard MTTR for a particular month, OpenNet shall compensate the Requesting Licensee an MTTR Rebate equal to the difference between the MTTR experienced by the Requesting Licensee and the standard MTTR in terms of number of days, multiplied by the number of services affected, multiplied by the Weekly Recurring Charge for the Residential End-User Connection, subject to a maximum of 30 times the Weekly Recurring Charge for the Residential End-User Connection.

12. SERVICE LEVEL AVAILABILITY

12.1 OpenNet shall offer a service level availability of 99.99% per month for the Residential End-User Connection. OpenNet shall offer to rebate the Requesting Licensee ten percent (10%) of the Monthly Recurring Charge if OpenNet fails to meet the service level availability for that month.

12.2 Service level availability for the Residential End-User Connection is calculated as follows:

$$\frac{(A - B)}{(A)} \times 100\%$$

Where A = 24 hours x number of days for the month (in hours); and

B = total network outage time for the Residential End-User Connection in the same month (in hours)

12.3 Subject to clause 2.6, the total network outage time is the sum of all minutes for which the Requesting Licensee Residential End-User Connection is unavailable, measured from the time each fault is reported by the Requesting Licensee to the time OpenNet confirms that the fault is restored, excluding fault incidents where OpenNet is prevented or restricted from restoring the service owing to matters that are not within OpenNet's control.

13. PROTECTION AND SAFETY

13.1 Each Party is responsible for the safe operation of its Network and in particular the safe operation of any equipment within its Network on its side of the connection at the designated Central Office and the Residential Premise.

13.2 Each Party shall, so far as reasonably practicable, take all necessary steps to ensure that the licence of the Residential End-User Connection, its operations and its implementation of this Schedule:

- (a) do not endanger the safety or health of any person, including the employees and contractors of the Parties; and
- (b) do not damage, interfere with or cause any deterioration in the operation of the OpenNet Network.

14. TERM OF LICENCE

14.1 The minimum contract term for a Residential End-User Connection shall be twelve (12) months starting from the service activation date of the Residential End-User Connection.

15. SUSPENSION

15.1 OpenNet may suspend the Requesting Licensee's licence to the Residential End-User Connection at any time until further notice to the Requesting Licensee if the Residential End-User Connection licence causes or is likely to cause physical or technical harm to any telecommunications network, system or services (whether of OpenNet or any other person) including but not limited to causing damage, interfering with or causing deterioration in the operation of the OpenNet Network. If the suspension is the result of the Requesting Licensee's fault, the Requesting Licensee shall continue to pay the Monthly Recurring Charge during the period of suspension.

15.2 Without limiting the exclusions or limitations of liability in this ICO Agreement, OpenNet shall not be liable to the Requesting Licensee for any Loss resulting from, or in connection with, suspension of a Residential End-User Connection licence under this clause 15.

16. TERMINATION OF LICENCE

- 16.1 The Requesting Licensee shall keep OpenNet informed on the Requesting Licensee's utilisation of each Residential End-User Connection six (6) months from the service activation date and when there are changes to the utilisation.
- 16.2 The Requesting Licensee must use or activate a service to a Retail Service Provider using the Residential End-User Connection within six (6) months from the service activation date of the Residential End-User Connection. If the Requesting Licensee fails to do so, OpenNet will deactivate the Residential End-User Connection upon giving the Requesting Licensee ten (10) Business Days prior notice, and the Requesting Licensee did not dispute such written notice given by OpenNet. The Requesting Licensee must pay OpenNet the Monthly Recurring Charges for the remainder of the minimum contract term.
- 16.3 OpenNet may immediately terminate a licence of Residential End-User Connection under this Schedule if:
- (a) the Requesting Licensee is no longer an FBO;
 - (b) the OpenNet ICO is revoked by the Authority under clause 12.8 of the ICO Agreement;
 - (c) the Authority removes the requirement for OpenNet to supply Residential End-User Connection under the OpenNet ICO or exempts OpenNet from supplying Residential End-User Connection under the ICO Agreement, provided that the date of termination shall not be earlier than the effective date of the Authority's decision;
 - (d) in OpenNet's reasonable opinion, the Requesting Licensee is using the Residential End-User Connection in contravention of an applicable law, licence, code, regulation or direction and OpenNet has the necessary confirmation from the relevant Government Agencies that the Requesting Licensee is in contravention of the applicable law, licence, code, regulation or direction;
 - (e) in OpenNet's reasonable opinion, the Requesting Licensee is using the Residential End-User Connection in a manner which places or allows a Third Party to act in contravention of an applicable law, licence, code, regulation or direction and OpenNet has the necessary confirmation from the relevant Government Agencies that the Third Party is in contravention of the applicable law, licence, code, regulation or direction;

- (f) the Residential End-User Connection is used other than the purposes specified in clause 1;
- (g) the licence in respect of Co-Location Space to which the Residential End-User Connection is connected has been terminated or has expired;
- (h) the Residential End-User Connection has become unsafe for its purpose; or
- (g) OpenNet's right to own, maintain or operate the Residential End-User Connection has been revoked or terminated, or has expired.

16.4 Either Party (**Terminating Party**) may terminate the Residential End-User Connection:

- (a) if the other Party is in breach of this Schedule other than failure to pay any sum for which the Requesting Licensee has been invoiced, and such breach remains un-remedied for a period of sixty (60) Calendar Days after receiving notice from the Terminating Party;
- (b) if the Requesting Licensee's Residential End-User Connection licence has been suspended pursuant to clause 15.1, and the cause of such suspension has not been remedied or rectified for a period of sixty (60) Calendar Days from the date of the suspension; or
- (c) if the Requesting Licensee is in breach of this Schedule by its failure to pay any sum for which the Requesting Licensee has been invoiced, and such breach remains un-remedied for a period of fourteen (14) Calendar Days after receiving notice from the Terminating Party. For the avoidance of doubt, this sub-clause shall not apply pending the resolution of any Billing Dispute in accordance with the provisions of Schedule 16 (Billing).

16.5 Upon termination of the licence of Residential End-User Connection:

- (a) the Requesting Licensee must immediately discontinue the use of the Residential End-User Connection; and
- (b) the Requesting Licensee must without undue delay disconnect all equipment connected to the Residential End-User Connection; and
- (c) OpenNet shall be responsible for removing all necessary Patching Services at the Requesting Licensee's cost in accordance with Schedule 15 (Charges).

Notwithstanding the above, the Requesting Licensee will not be liable for OpenNet's costs of removing all necessary Patching Services at the Building MDF Room, or if the termination is the result of OpenNet's fault

- 16.6 If the licence of a Residential End-User Connection is terminated as a result of the Requesting Licensee's fault, the Requesting Licensee shall be liable to OpenNet for the Monthly Recurring Charges for the remainder of the minimum contract term.

CLAUSE 16.7 – MODIFICATION REQUIRED

- 16.7 If the Requesting Licensee fails to disconnect its equipment from the Residential End-User Connection under clause 16.56(b), OpenNet may at its sole discretion remove and/or dispose of the Requesting Licensee's equipment. The Requesting Licensee shall pay to OpenNet all reasonable costs associated with the work undertaken by OpenNet including the cost of disposing the Requesting Licensee's equipment. The Requesting Licensee shall have no claim whatsoever against OpenNet in connection with the removal and/or disposal of the Requesting Licensee's equipment from the Residential End-User Connection.

IDA Directed Modifications: IDA notes that the reference to clause 16.6(b) is incorrect, as the relevant clause providing for disconnection of equipment from the Residential End-User Connection is clause 16.5(b). Accordingly, IDA directs OpenNet to correct this referencing error. JON 11 Apr 12 : Amended as per IDA's Direction.

17. REDUNDANCY SERVICE

- 17.1 The Requesting Licensee may acquire:
- (a) for a Residential End-User Connection of 1:24 Split Ratio for the purpose of providing GPON services, one separate fibre strand from OpenNet's splitter at the Building MDF Room to the First Termination Point of the Residential Premise;
 - (b) for a Residential End-User Connection of 1:24 Split Ratio for the purpose of providing OE services, one separate fibre strand from OpenNet's FDF at the Building MDF Room to the First Termination Point of the Residential Premise;
- or

(c) for a Residential End-User Connection of 1:1 Split Ratio, one separate fibre strand from OpenNet's FDF at the CO to the First Termination Point of the Residential Premise

(Redundancy Service) at the same prices, terms and conditions as the Residential End-User Connection through a request in the form of Annex 1A either manually or via the OpenNet Platform, unless stipulated otherwise in this clause 17.

17.2 OpenNet shall provide the Redundancy Service via the same duct and along the same path as the existing Residential End-User Connection, without Duct Diversity and without Path Diversity. OpenNet may provide the Redundancy Service using a separate fibre strand from the same fibre cable that carries the existing Residential End-User Connection. OpenNet shall have the right to reject a request for the Redundancy Service if both fibres in the First Termination Point are in use.

17.3 The Requesting Licensee is eligible to acquire a Redundancy Service for the Residential End-User Connection provided that the Requesting Licensee has acquired or is acquiring an equivalent Residential End-User Connection to the same Residential Premise. The Requesting Licensee may request OpenNet to reject the Request for the Residential End-User Connection in the event that OpenNet is unable to provide the Redundancy Service, but such Requests for the Residential End-user Connection and the Redundancy Service must be submitted together to OpenNet.

17.4 The Requesting Licensee shall be responsible, at its own cost and equipment, for the implementation of diversity or redundancy for its services using the Redundancy Service provided by OpenNet.

17.5 OpenNet shall make the Redundancy Service available to the Requesting Licensee, except where OpenNet is unable to build the requisite infrastructure (other than fibre) to provide the Redundancy Service or due to any of the reasons stated in clause 5.4.

18. RELOCATION SERVICE FROM ONE RESIDENTIAL ADDRESS TO ANOTHER RESIDENTIAL ADDRESS

CLAUSE 18.1 – MODIFICATION REQUIRED

18.1 The Requesting Licensee may request to relocate the End-User Connection for an End-User to the End-User's new or other residential address **(Relocation Service)** through a request in the form of Annex 1A- via the OpenNet Platform when available giving, amongst others, the following information:

IDA Directed Modifications: Comments were received that it is unclear from OpenNet's proposed changes whether all applications for Relocation Services must be submitted via the manual form. In the interests of efficiency and for clarity, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 18.1 to clarify that Relocation Services can be requested via the Platform and B2B transactions. [ON 11 Apr 12 : Amended as per IDA's Direction.]

- i. The Order Request Identifier ~~unique reference number~~ of existing connection at old residential premise
- ii. Service activation date at new residential premise

CLAUSE 18.1(iii) – MODIFICATION REQUIRED

~~iii. NRIC/FIN/Passport Number of the End User~~

IDA Directed Modifications: Several industry respondents have commented that the NRIC/FIN/Passport Number of the End-User is currently not required, and therefore OpenNet should similarly not require the NRIC/FIN/Passport Number of the End-User to be provided in respect of requests for Relocation Services. A respondent also raised the issue of maintaining customer privacy. IDA agrees with the comments provided and accordingly directs OpenNet to propose, for IDA's approval, modifications to clause 18.1 to remove the requirement proposed by OpenNet in clause 18.1(iii). [ON 11 Apr 12 : Amended as per IDA's Direction.]

- iii. All applicable supporting documents evidencing that the Request for Relocation is at the request of or for the benefit of one End User.

CLAUSE 18.2 – MODIFICATION REQUIRED

18.2 Subject always to the terms of this Schedule, OpenNet shall provide the Relocation Service by activating a new Residential End-User Connection at the new Residential Premise in accordance to clause 6, followed by deactivation of the existing Residential End-User Connection at the former premise ~~and activate a new Residential End-User Connection at the new Residential Premise~~. The expiry date of the minimum contract term which will be computed from the initial order remains unchanged.

IDA Directed Modifications: An industry respondent commented that there do not appear to be any Service Level Guarantees for Relocation

Services. As such, the timeframe for the provision of Relocation Services is unclear. IDA considers that it would be useful for Service Level Guarantees and provisioning timeframes for Relocation Services to be specified. At a minimum, OpenNet shall provide SAP remedy for the activation of the service at the new Residential Premise. Accordingly, IDA directs OpenNet to propose, for IDA's approval, the modifications to clause 18.2 to clarify:

- (a) when OpenNet shall deactivate the connection at the previous premise; and [ON 11 Apr 12 : Amended as per IDA's Direction.]**
- (b) at a minimum, that the SAP framework and the remaining terms shall apply for the activation of the connection at the new premise, save that the minimum contract term is computed from the date of the initial order and that the expiry date of the minimum contract term remains unchanged. [ON 11 Apr 12 : Amended as per IDA's Direction.]**

CLAUSE 18.3 – MODIFICATION REQUIRED

- 18.3 For the avoidance of doubt, each ~~Every~~ Request for Relocation Service shall constitute one (1) ~~two (2)~~ Requests for ~~Basic Mandated Services and Layer 1 Redundancy Services, ie. a Request for Deactivation of Residential End User Connection and a Request for~~ Residential End-User Connection, ~~both of~~ which must fall within the Maximum Quota.**

IDA Directed Modifications: Comments were received that the Relocation Service absorbs the OpenNet quota at twice the rate of standard orders, and there is no justification for this since the additional work to be performed by OpenNet is negligible. IDA considers that the relocation of service should not take up more than one quota since deactivation of service currently is not part of OpenNet's quota. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 18.3 to state that such Relocation Services should not take up more than one quota. [ON 11 Apr 12 : Amended as per IDA's Direction.]

CLAUSE 18.4 – MODIFICATION REQUIRED

18.4 The Requesting Licensee shall make payment of the applicable charges for every Request for Relocation Service which includes charges for Relocation Service, Installation, activation and deactivation of Patching in the CO and MDF room in accordance to Schedule 15 (Charges), where applicable. A Cancellation Charge as set out in Schedule 15 (Charges) shall be applicable if the Requesting Licensee cancels the Request for Relocation Service after acceptance by OpenNet. A change in the End-User's new Residential Premise address shall not constitute a cancellation.

IDA Directed Modifications: IDA refers OpenNet to section 2 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 18.4 as set out in section 2 of the Explanatory Memorandum. [ON 11 Apr 12 : Amended as per IDA's Direction.]

CLAUSES 18.5 AND 18.6 - APPROVED

18.5 At all times, the Requesting Licensee shall be solely responsible for the relocation of its services to the End-User arising from the Request for Relocation Service.

18.6 For avoidance of doubt, there shall be no Express Service Activation for a Request for Relocation Service.

CLAUSE 19 –MODIFICATION REQUIRED

IDA Directed Modifications: Comments were received that it is unclear from clause 19 what process an Requesting Licensee should follow to verify that they are requesting for a second Termination Point. IDA agrees that there is merit to clarify on the above. Comments were also received that an Requesting Licensee should not be required to submit a separate order for additional Termination Point at the same premises, as such Request for additional Termination Point should be part of the original Request for a Residential End-User Connection. IDA agrees that this would promote efficiency. IDA also refers OpenNet to the directed modifications under clause 5.3(e) above

It is also not clear if OpenNet will provide two fibres in the second Termination Point and the treatment (e.g., applicable charges) of the Second fibre (if applicable).

Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 19 to: (a) clarify that a separate order would not be necessary for the installation of the Second Termination Point; (b) ensure consistency with directed modifications to clause 5.3(e); and (c) clarify whether there will be two fibre in the Second Termination Point and the applicable charges related to the second fibre in the Second Termination Point.

19. SECOND TERMINATION POINT

19.1 ~~The Requesting Licensee may acquire~~ Only where necessary, OpenNet shall install a Second Termination Point:

- a. for a Residential End-User Connection of 1:24 Split Ratio for the purpose of providing GPON services, one separate fibre strand from OpenNet's splitter at the Building MDF Room to the Second Termination Point of the Residential Premise;
- b. for a Residential End-User Connection of 1:24 Split Ratio for the purpose of providing OE services, one separate fibre strand from OpenNet's FDF at the Building MDF Room to the Second Termination Point of the Residential Premise; or
- c. for a Residential End-User Connection of 1:1 Split Ratio, one separate fibre strand from OpenNet's FDF at the CO to the Second Termination Point of the Residential Premise

on the same terms and conditions as the Residential End-User Connection ~~through a request in the form of Annex 1A~~ via the OpenNet Platform when available, unless stipulated otherwise in Clause 19.

19.2 OpenNet shall have the right to reject a Request for Second Termination Point if all the fibre of the First Termination Point are not in use.

19.3 The Requesting Licensee may submit a Request for Second Termination Point provided the Requesting Licensee has submitted a Request for an Residential End-User Connection to this Second Termination Point.

CLAUSE 19.4 – MODIFICATION REQUIRED

19.4 The Requesting Licensee shall pay OpenNet the applicable Installation Charge for Second Termination Point, ~~Patching Charge~~ and Installation of Internal Cabling Charge specified in Schedule 15 (Charges) for provisioning the Residential End-User Connection for the Second Termination Point.

IDA Directed Modifications: IDA refers OpenNet to section 2 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to clause 19.4 as set out in section 2 of the Explanatory Memorandum. [ON 11 Apr 12 : Amended as per IDA's Direction. ON's Comments 11 Apr 12 : ON is not proposing a manual process as we would require RL to submit via OpenNet Platform in order to perform the necessary checks to assess if a Second TP can be provisioned.]

19.5 A site survey shall be conducted to assess the site where the Second Termination Point is to be installed.

CLAUSE 20 – MODIFICATION REQUIRED

20. FIBRE ~~HANDOVER~~TAKEOVER PROCESS

20.1 The proposed provisioning sequence are as follows:

i. New Requesting Licensee shall submit a Request for Fibre ~~Takeover Handover~~ to OpenNet through OpenNet Platform when available. ~~and OpenNet shall perform the Fibre Handover, according to the terms of this Schedule, within 4 Business Days thereafter.~~

ii. No later than the next ~~B~~business Day after receipt of New Requesting Licensee's Request for Fibre ~~Takeover Handover~~, ~~OpenNet shall inform the~~ Existing Requesting Licensee will be informed of ~~the~~OpenNet's intention to deactivate the existing connection. ~~It is then the Existing Requesting Licensee's responsibility to liaise with its affected Retail Service Provider accordingly. Existing Requesting Licensee will have three (3) business days to reject such Request with the following reasons :~~

a) The Existing Requesting Licensee has confirmed with the End-User that the connection is still required and is able to provide such evidence; or

- b) The Existing Requesting Licensee requires the connection to serve another RSP whom the End-User has a contract with and the End-User confirms as such.
- ii- otherwise Request will be deemed as accepted and would be processed accordingly by OpenNet.
- iii. OpenNet will process the Request and perform the Fibre Takeover, as according to the terms of this Schedule, within three (3) business days thereafter. Both New and Existing Requesting Licensees will be informed of date of Fibre Takeover three (3) business days in advance. ~~not entertain any request from any party other than the New Requesting Licensee to suspend or cancel the Request for Fibre Handover.~~
- iv. It is then the responsibility of both the New and Existing Requesting Licensee to liaise with its affected Retail Service Providers accordingly.
- v. The New Requesting Licensee is responsible for providing accurate information to OpenNet and shall indemnify OpenNet for any loss or damages occasioned by or arising from wrong information provided which resulted in OpenNet activating or deactivating any Residential End-User Connection.
- vi. The Existing Requesting Licensee shall be entitled to :
- (a) Waiver of the Pre-mature Termination Charge (if any); and
- (b) Rebate amount equal to one (1) month of the Monthly Recurring Charge,
- for the affected connection.
- vii. The New Requesting Licensee shall be entitled to :
- (a) Rebate amount equal to one (1) month of the Monthly Recurring Charge,
- for the affected connection.

IDA Directed Modifications: Comments were received from several respondents that OpenNet's proposed process in clause 20 would lead to confusion, disputes and service disruptions, and clause 20 should be

deleted in its entirety. For example, a respondent highlighted that an Existing Requesting Licensee would have entered into a contract with OpenNet for the circuit in question. It is therefore up to the Existing Requesting Licensee to decide whether or not to deactivate the Termination Point, so long as it continues to pay for the connection. OpenNet should not be allowed to unilaterally overturn that contract.

After careful consideration, IDA agrees that the current process as proposed by OpenNet in clause 20 would unnecessarily increase the complexity and coordination required between the parties involved. OpenNet would therefore have to revise its process to address the concerns raised by the industry.

Unless OpenNet could propose the necessary modifications to address the industry concerns as highlighted above, IDA would require OpenNet to remove its proposed Fibre Handover Process in its entirety.

Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to comply with the above.

[ON 11 Apr 12 : ON had proposed the modifications to address the industry's concerns as above.]

ANNEX 1A – MODIFICATION REQUIRED

IDA Directed Modifications: IDA refers OpenNet to its directed modifications under clause 18.1(iii) of Schedule 1 above. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to Annex 1A to reflect IDA's requirements in its directed modifications to clause 18.1(iii) as above.

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ANNEX 1A: REQUEST FORM RESIDENTIAL END-USER CONNECTION

Request for Residential End-User Connection

Requesting Licensee	Please Tick only one option: <input type="checkbox"/> Relocation Service from one Residential Address to another Residential Address <input type="checkbox"/> New End User Connection		
	For Request for Relocation Service from one Residential Address to another Residential Address, please provide: Order Identification Number (ORI) of existing connection: _____		
	Date of Application: _____ Requested Date of Activation: _____	Application Reference Number: \	
	Preferred Installation Session*: AM/PM Residential End-User Name: _____	Residential End-User Telephone Number: _____	
	Residential End-User NRIC/FIN/Passport no.: _____		
	Residential End-User Address of NEW Connection: _____		
For NEW connection, please select:			
Split Ratio: 1:1 / 1:24	Technology: GPON / OE		
(Change of Split ratio is not allowed for Relocation Service from one Residential Address to another Residential Address)			
(only applicable for 1:24 Split Ratio)			
Any other info: _____ <input type="checkbox"/> Redundancy Service is required <input type="checkbox"/> Request for Residential End-User Connection to be rejected if Redundancy Service is not available			
The Requesting Licensee acknowledges that by submitting this Request Form, it undertakes to pay any additional charges which may be imposed by OpenNet pursuant to clause 6.3 of Schedule 1. For avoidance of doubt, the Requesting Licensee is still liable for the applicable Monthly Recurring Charge and one-time charges.			

For and on Behalf of Requesting Licensee

Requesting Licensee	Sign: _____	Company Stamp: _____
	Name: _____	Company Name: _____
	Designation: _____	
	Contact Number, Fax and email address: _____	


Part 1: Date: _____

OpenNet	<input type="checkbox"/> Application accepted: Circuit Identification Number: _____ Tentative Provision Date : _____ <div style="text-align: right;">Provide internal cabling to First Termination Point (Y/N)</div>	
	<input type="checkbox"/> Application rejected Reason for rejection: _____	
	OpenNet Name / Signature: _____	Queue Status: _____

Part 2: Date: _____

OpenNet	<input type="checkbox"/> Circuit Provision: Revised Provision Date (where applicable): _____ Reason: _____ <div style="text-align: right;">Any other reason: _____</div>	
	<input type="checkbox"/> Application rejected Reason for rejection: _____	
	OpenNet Name / Signature: _____	

ANNEX 1B: REQUEST FOR CANCELLATION OF RESIDENTIAL END-USER
CONNECTION DUE TO INSTALLATION-RELATED FAULT

		Request for Cancellation of Residential End-User Connection Due to Installation-related Fault	Serial No:
Date & Time of Reporting of Installation-related Fault :			
Order Request Identifier (ORI) Number :			
Trouble Ticket No:		<input type="checkbox"/> 1 hour activation	
Appointment Date & Time :		Arrival Time :	
Number of Hours Since Time of Reporting of Installation-Related Fault :			
END-USER INFORMATION			
Authorised Person Name:		*Mr/Mrs/Miss/Mdm/Dr	
*NRIC/FIN/Passport No:			
Contact no:			(HP):
Location of Installation		Blk/House:_____ Unit No: #_____ -_____ Street Name: _____ Building Name: _____ Postal Code :S(_____)	
ACKNOWLEDGEMENT			
<p>This is to acknowledge that the installation-related fault has been attended and the fault resolution has not been resolved after seventy-two (72) hours from commencement of the joint investigation.</p> <p>The Requesting Licensee hereby requests for the immediate cancellation of the Residential End-User Connection.</p>			
Fault Attended By		Acknowledgement by Requesting Licensee	
OpenNet Technician Name:		Requesting Licensee Technician Name :	
OpenNet Technician Signature:		Requesting Licensee Technician Signature:	


*Please delete where inapplicable.

ANNEX 1B – MODIFICATION REQUIRED

ANNEX 1B: REQUEST FOR CANCELLATION OF RESIDENTIAL END-USER
CONNECTION DUE TO INSTALLATION-RELATED FAULT

Several industry respondents have commented that the NRIC/FIN/Passport Number of the End-User is currently not required, and therefore OpenNet should similarly not require the NRIC/FIN/Passport Number of the End-User to be provided. A respondent also raised the issue of maintaining customer privacy. IDA agrees with the comments provided. Similarly, IDA also holds the view that company's BRN is not necessary. Accordingly, IDA directs OpenNet to propose, for IDA's approval, modifications to Annex 1B to comply with the above requirements. [ON 11 Apr 12 : Amended as per IDA's Direction.]

ANNEX 1C: FAULT RECTIFICATION SERVICE REPORT

		Fault Rectification Service Report	Serial No:
Appointment Date: Time:		Arrival Time: Completion Time:	
Trouble Ticket No:		<input type="checkbox"/> 1 hour activation <input type="checkbox"/> Maintenance Fault Rectification <input type="checkbox"/> Follow up end-user appointment	
END-USER INFORMATION			
Authorised Person Name:		*Mr/Mrs/Miss/Mdm/Dr	
*NRIC/FIN/Passport No:		_____	
Contact no:		(HP):	_____
Company:		BRN:	_____
Registered Address:		Blk/House: _____ Unit No: # _____ - _____ • _____ • _____ Postal code: S(_____)	
LOCATION OF INSTALLATION			
A-END (CO/MDF)		B-END (CO/MDF, End-User's Premise)	
Blk/House: _____ Unit No: # _____ - _____ Street Name: _____ Building Name: _____ Postal code: S(_____)		Blk/House: _____ Unit No: # _____ - _____ Street Name: _____ Building Name: _____ Postal code: S(_____)	
End User Declaration (check only one box)			
<input type="checkbox"/> I am the owner of the above premises			

ANNEX 1C: FAULT RECTIFICATION SERVICE REPORT

<input type="checkbox"/> I, Name: _____, NRIC _____ am authorised by the owner of the premise and/or the above-stated company to sign this form and permit OpenNet Pte Ltd or its contractor to enter the premises and conduct the fault rectification work. I will bear full responsibility if the owner should dispute (a) my authority, or (b) any action taken by OpenNet Pte Ltd at my instructions.								
Company Stamp (if applicable):								
For Official Use Only								
OPTICAL MEASUREMENTS, WHERE POSSIBLE (Measured by RL)								
Fault description:								
Test Measurement (CO to Serving Cabinet):	1310nm		1490nm		1550nm		Distance (m)	
Test Measurement (CO to 1 st TP):	1310nm		1490nm		1550nm		Distance (m)	
Test Measurement (Segment Services A-END to B-END)	1310nm		1490nm		1550nm		Distance (m)	
Certified by ON:								
Technician Name:					Date:			
Technician Signature:					Time:			

ANNEX 1C – MODIFICATION REQUIRED

IDA Directed Modifications: Comments were received in respect of the “Declaration” section of Annex 1C that the Requesting Licensee should not be the party permitting OpenNet to enter the End-User’s premise. IDA agrees that the “Declaration” section is intended for the End-User to make the declaration and not the Requesting Licensee.

Several industry respondents have commented that the NRIC/FIN/Passport Number of the End-User is currently not required, and therefore OpenNet should similarly not require the NRIC/FIN/Passport Number of the End-User to be provided. A respondent also raised the issue of maintaining customer privacy. IDA agrees with the comments provided and agrees that OpenNet should not require Requesting Licensee/End-User to provide the NRIC/FIN/Passport Number of the End-User. Similarly, IDA also holds the view that company’s BRN is not necessary.

Accordingly, IDA directs OpenNet to propose, for IDA’s approval, modifications to Annex 1C to reflect the above requirements. [ON 11 Apr 12 : Amended as per IDA’s Direction.]

ANNEX 1C: FAULT RECTIFICATION SERVICE REPORT

ANNEX 1C: FAULT RECTIFICATION SERVICE REPORT

OPTICAL MEASUREMENTS, WHERE POSSIBLE (Measured by ON)								
Fault description:								
Test Measurement (CO to Serving Cabinet):	1310nm		1490nm		1550nm		Distance (m)	
Test Measurement (CO to 1st TP):	1310nm		1490nm		1550nm		Distance (m)	
Test Measurement (Segment Services A-END to B-END)	1310nm		1490nm		1550nm		Distance (m)	
Certified by :								
RL Name:				Date:				
RL Signature:				Time:				
Fault Root Cause Description								
ACTION TAKEN/ADDITIONAL REMARKS								
CUSTOMER ACKNOWLEDGEMENT AND ACCEPTANCE								
Remarks/Comments:								
This is to acknowledge that the fibre fault rectification has been attended and the fault resolution is effective								
Fault Attended by:				Resolution Accepted by End-User:				
Technician Name:				End-User Signature:				
Technician Signature:								
Resolution Verified and Accepted by RL (Only applicable for <u>1 hour activation</u>) :								
RL Name:				RL Signature:				

End-Users can refer to their retail service providers for more information to address and resolve any end user service related issues.

*Please delete where inapplicable.